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ORIGINAL COMMUNICATIONS.

THE PHONOGRAPH IN MEDICINE.

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PHONOGRAPHIC DICTATION.

ABOUT ten years ago the public were startled by the announcement that Thomas A. Edison had invented a machine for reproducing the human voice. It was called the Phonograph, and was exhibited throughout the country very much to the satisfaction and to the astonishment of the community generally. Since that time very many improvements have been made, although it has not been brought to perfection as rapidly as was expected at the time it was first brought out.

There are many advantages to be gained from the use of this instrument, which will be apparent to the general practitioner, some of which may be mentioned. It will be especially valuable to him in the matter of reporting cases, as he will only have to talk a few minutes about any case, and will thus be enabled to record all that pertains to the subject for future reference.

It may be well, however, to make some remarks concerning the general effect which the introduction of the phonograph is likely to have upon literature. This appears to be the more pressing from the necessity which exists at present amongst a large number of speakers who lack the ability to express in concentrated and consecutive manner their ideas upon any subject. Many of our best physicians are unable to speak readily off-hand; a large majority of them are compelled to spend a considerable portion of time in the way of preliminary details while preparing articles for publication, or in getting ready for lectures. All this, of course, requires time, it requires labor, but with the facility furnished by the phonograph much of this burden can be dispensed with, because it is only necessary that a speaker shall possess those qualifications which are of such importance to a public speaker.

In the first place, in using this instrument, concentration of thought is demanded, and, in the second place, the speaker must adapt himself to the circumstances by articulating distinctly. Very many of the physicians of the present day are possessors of writing-machines,—type-writers as they are generally called,—and with them we are able to produce articles for publication with far greater rapidity than with the pen, and with greater ease. This method of transferring one's thought to writing is much less laborious than by the older methods, but is distanced in the race by the invention of the phonograph. A person having a writing-machine can sit down and in one-third of the time required for actual writing with the pen he can do as much, and with far less labor and expenditure of strength in the preparation of articles for publication or for reference, a lecture for delivery, or he can record the circumstances attending any case, which can be reproduced at any time in his own voice, and the same may be filed away for future reference. But the keeping of medical notes is not its only advantage, for if a man wishes to record his will all that is necessary for him to do is to record it upon the phono-

graph. After having thus recorded it, he can send it to the electrotyping establishment and have the cylinder electrotyped, and then, of course, it becomes permanent. It can be used a month hence, or ten, twenty, or forty years from the present time, and will reproduce the voice of the testator at all seasons.

An excellent thing in connection with this instrument will be the making of contracts and agreements; the whole matter can be talked over by the parties, both using the same cylinder, in the form of question and answer. Each party will thus leave a record showing just what he agrees to perform and what he declines to perform or undertake

Probably one of the greatest revolutions which has ever taken place in literature since the discovery of the art of printing is now about to be witnessed. As I sit in front of the phonograph talking, I am reminded that this cylinder of wax can be transferred to the printing-office and five hundred to one thousand words can be reproduced from a cylinder, and that cylinder can be used for the reproduction of all the sounds for the instruction of the person setting the type. This type is set up just the same as we write upon the writing-machine; each line is set up by itself, and as it is finished an automatic arrangement is attached by which a plate of that particular line is made of the material used for the making of type, and there is no necessity for manuscript. A person can send the cylinder to the printing-office, containing five hundred or a thousand words, and it will be set up immediately by a type-writer, and, what is known in printers' parlance, a "rough proof" will be furnished to the messenger, who takes the record in the course of half an hour. It will be completed in that time for the author's examination and revision. A book can be reproduced at a trifling expense by this method. Medical literature will also be the gainer on account of the lowered expense of work of this character.

While the effect of the phonograph will be felt upon literature, and while its influence will be far-reaching in medicine, there are many other channels in which it will have an equally interesting effect. In this connection, it may be mentioned that its discovery will have a tendency to develop a taste for art. The songs of the most accomplished musicians can be reproduced upon this cylinder; their voices may be perpetuated through all time. Every family having access to a phonograph can have their cylinders containing the music, as the instrument will reproduce any sound which is made by the human voice, or by any instrument. The notes of the piano are heard just as distinctly from the cylinder as they are when the player touches the keys. In fact, at the present time, this instrument is being used for the purpose of delivering addresses. It is only necessary to connect the instrument with a motor for the purpose of keeping it in active operation. It will reproduce the speech of Patrick Henry or of Daniel Webster, or any other that may be desired, provided an opportunity is given of placing it upon the cylinder.

There are, however, some special features which commend it to the physician. We have already spoken of the manner of reporting and recording cases. It often happens that a physician cannot attend at all hours upon his office duties; patients coming in can there record their symptoms; they can thus ask the doctor questions privately, and he will be furnished with a full account when he comes to examine the cylinder. Should he wish to give special directions while in attendance upon any family where a phonograph is at hand, it will only be necessary for him to sit down and give his instructions to the instrument. They can be reproduced for the benefit of the nurse, and for the benefit of any of the members of the family at will. Probably in the study of heart diseases, and in determining the character and conditions attending aneurism, the phonograph will be brought into use, and will prove a material aid to the physician in his daily work. The probabilities are that the sounds of the heart can be so magnified in connection with the use of this instrument that the physician will be able to understand and appreciate the variations from the normal better than ever before.

The influence which this invention will have upon modern civilization can only be estimated; it cannot be computed. As I sit here talking to the instrument, and realize that my voice, with every modulation in tone, every word and sentence, can be reproduced in full at the antipodes by means of this wax cylinder, it seems almost incredible, and yet it is true.

Some ten years ago, when Mr. Edison first invented the phonograph, it was rather amusing to listen to those who were skeptical and suspicious, and who claimed that the whole thing

was a hoax, and that it was impossible to reproduce the human voice. These doubters asserted that this was accomplished by means of some other person either directly or through a wire, or there was some occult agency by which the sound of the voice was imitated.

To all physicians who are interested in progressive advancement during the coming century, it will be regarded as an acceptable addition. It will be the means of saving them much burdensome labor, and at the same time will enable many of them to give their brethern in the field the benefits of their observation and experience. I look forward with no little satisfaction to the time when all the leaders of the profession will be in possession of one of these instruments, and when they will be able to use them not only to their own advantage but to the advantage of their brethren, and for the benefit of their patients and of suffering humanity.

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TURPENTINE IN DIPHTHERIA.

By W. M. HATFIELD, M.D.,
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ON June 19th I was called to see a boy, eight years of age, who had been quite sick four days. He was first attacked by chilliness, a general feeling of soreness over the body, and a severe pain in the head. He had, when I first visited him, a full, bounding pulse—120 to the minute. Temperature, 104½°. Tonsils slightly enlarged. Cervical, submaxillary, and sublingual glands all enlarged, much more so on one side than on other, but no diphtheritic exudation on the inside of the throat. I at once put him on sulphur insufflations hourly, and one-half-drop doses of fluid extract of belladonna and aconite, to be given hourly until fever came down. Next day visited him again. No reduction of either pulse or temperature, swelling larger, diphtheritic exudate well defined on left tonsil, and both tonsils badly swollen, making deglutition difficult. I at once commenced swabbing the throat with Monsel's solution and glycerin, three drachms of the former to one ounce of the latter, every four hours, alternating it with a mixture of quinine, iron, listerine, and glycerin, every four hours, to be given with whisky, and also using a sulphur wash about every two hours; applying externally a mixture of chloroform, turpentine, and olive-oil. I watched the case carefully, giving what I thought was good treatment for a period of four days, only to find that the diphtheritic exudation had extended over the roof of the mouth, had spread into and almost occluded the nasal cavity; that neither the temperature nor pulse had fallen below 104 and 120, respectively, and that the head had to be thrown well back to permit of breathing. All this, accompanied by marked weakness, stupor almost amounting to coma, and a very fetid breath, induced me to give a gloomy prognosis.

I therefore decided to give turpentine, and accordingly had a mixture prepared in which two teaspoonfuls of the drug were administered.

A portion of this dose was vomited in about a half-hour, and what had not been ejected was reinforced by another teaspoonful of the turpentine. In the meantime I anxiously awaited its effect. It was not long, however, until the breathing became easier, the temperature began to fall, registering only 102°, while the pulse became slower and perceptibly stronger.

For the first time since the patient was sick he began perspiring. His temperature remained from this time lower, but his pulse continued from 110 to 120 for about two weeks. The turpentine was continued in two-teaspoonful doses every eight hours, and at the expiration of twenty-four hours a marked change was observed in the exudation: a portion of it was hanging in shreds, while numerous specks of deep-red mucous membrane could be seen, over which before the membrane had formed a complete covering. In about four days the membrane had entirely disappeared, but, as the swelling of the throat still remained, the turpentine was given about a week longer, when it was discontinued. Paralysis now set in, making deglutition for about three days very difficult, but, under cod-liver oil and strychnia externally and nutritious and stimulating enemas, his strength was kept up until swallowing again became possible.

The turpentine given acted only moderately on the bowels at first, but subsequently had to be given in smaller doses and in combination with astringents to counteract its laxative effect. In regard to the vehicle for the turpentine, Dr. Miller recommended giving it with equal parts of aromatic elixir of licorice, which I found to cover its taste fairly well. I omitted adding that before the second dose of the turpentine had been given the fetid smell of the breath had disappeared.

HÆMORRHAGIC FEVER.

By B. F. LAMB, A.M., M.D.

THE reappearance of yellow fever in Florida at the present time would not be a matter of surprise, from the fact that the epidemic of last year was of marked virulence as well as widely distributed, so that the destruction of the disease-microbes became necessarily less effectual than if the epidemic had been lighter, or had been confined to a single locality.

The recently reported case at Sanford, however, does not appear to have been of the same nature as that of last season, as, according to the report of the President of the Board of Health, this was a case of sporadic or endemic yellow fever, and non-infectious, and hence need not occasion any alarm to the public.

The sporadic or non-infectious variety of yellow fever is a disease of yearly occurrence in the South, and is known by different names in different localities, such as yellow chills, yellow fever, malignant hæmaturia, chagres fever, etc., but is more extensively known under the general name of hæmorrhagic fever, under which name it is proposed to briefly describe this disease as it has appeared under actual observation.

Hæmorrhagic fever, as its name implies, is generally characterized by the presence of hæmorrhages, and, though of late more closely observed than formerly, is not necessarily a new disease, as similar symptoms have long been described by writers as prevailing in different quarters of the globe under the name of malignant malarial fever.

There is no question, however, that the disease has prevailed in the United States during the last decade to a greater extent than ever before, and consequently merits a more especial attention than it has heretofore received.

As to the distribution of the disease, it may be said to occur most frequently in intensely malarial districts, as in the paludal areas of Virginia, North and South Carolina, throughout the coast of the Gulf of Mexico, and as far as Panama, it being especially virulent in the vicinity of Vera Cruz and of Aspinwall. A remarkable feature of this disease is its proneness to attack the white race, as negroes have seemed comparatively exempt, notwithstanding the exposures and unfavorable surroundings to which they are accustomed.

There are two general varieties of hæmorrhagic fever, namely, the hæmorrhagic and the cholepyrrhic, though there are numerous modifications of each and of the two combined.

The former, which is much the more prevalent, is characterized by the following symptoms:—

The patient, usually more or less debilitated from continued exposure to malarial poison or from repeated attacks of intermittent, is suddenly prostrated with a severe chill, accompanied with pain in the lumbar region and in the epigastrium, and with paroxysmal vomiting. A clammy perspiration soon appears, accompanied with a hæmorrhage from the kidney amounting to two to four fluidounces, and with a general tendency to collapse. After an hour or more of the cold stage the fever gradually rises, with a small, thready pulse ranging from 130 to 160 per minute. Patient continues to vomit, while the ejecta becomes changed from the ordinary to one of the appearance of pure bile. The entire surface becomes a deep yellow, including the conjunctiva, the tongue, the sordes of the teeth, and even the finger-nails. The anxiety of the patient is pronounced, amounting even to fright. The features are compressed, the eyes are sunken, and, as the hue of the skin assumes a darky appearance, there remains not the slightest resemblance of the patient to himself. After the elapse of six hours, sometimes later, the chill returns without apparent abatement of the fever, and may last but for a few minutes, to be followed by a still higher temperature, the thermometer making 105° F. in some cases, though usually the fever does not exceed 102° F. at maximum.

The hæmorrhage is repeated at intervals of about two hours and in corresponding quantities.

The blood is dark, composed apparently of venous blood in an advanced state of decomposition, and accompanied in some cases with cholepyrrhin and with a limited amount of urine, but in pronounced cases the discharge is limited to hæmorrhage, which drains away as from a wound. This discharge is invariably of an acid reaction, and the blood does not coagulate upon standing, though the black corpuscles separate more or less from the liquor sanguinis. In fatal cases the kidney seems to early receive a death-stroke, as indicated by the urinous breath and symptoms of uræmic poisoning, the mind becoming clouded, and finally spasm and coma supervene. The liver is similarly arrested in its functions and likewise the bowels. The

heart, lungs, and nervous system alone performing the office of life's maintenance, an immediate re-establishment of the suspended functions only averts death.

There is no increase in the volume of the liver and no pain nor tenderness, but simply paralysis or arrest of function. The biliary elements, thus finding no outlet, accumulate in and permeate the whole system, giving it the peculiar color mentioned. The functions of the bowels having been similarly arrested, they become insusceptible to ordinary impressions, and require the most powerful remedies to produce any response. Early in the attack the skin is active, but soon fails to respond, and performs the function of elimination only mechanically. There is absolute anorexia, while the thirst is insatiable, although nothing is retained on the stomach. The tongue is coated with a heavy brown fur, soon becoming of a deep yellow from the secretion of the salivary glands. Of the above general symptoms there is, in fatal cases, no abatement, but on the contrary a continued intensity of the same until death finally ends the scene about the third or, at furthest, on the fourth day.

In convalescents, on the contrary, there is an amelioration of all the foregoing symptoms by the expiration of the second day. The first indication is a general lowering of the pulse-rate, followed by a lighter appearance of the hæmorrhage, with a gradual reappearance of the urinary secretion. The nausea and vomiting have become less severe, and the deep yellow color begins to assume a lighter hue in the thinner parts of the skin and disappears lastly from the sclerotica.

The exhaustion of the patient is complete, and, notwithstanding an assured recovery, it is weeks before he can safely leave his couch or assume his normal attitude.

The second variety of hæmorrhagic fever is the cholepyrrhic, and is in general aspects very similar to the first. It is much less frequent, amounting to about 10 per cent. of the whole.

The characteristic symptom of this variety is the entire absence of hæmorrhage and the substitution of cholepyrrhin, which flows from the kidney in about the same quantity as blood in the former. So thick and viscid is this excretion that in some instances it is quite similar to the yelk of an egg in appearance. Its reaction is also acid and in very severe cases without the accompaniment of urine.

The pulse, temperature, respiration, and all other objective symptoms correspond closely with those of the hæmorrhagic variety. The absence of hæmorrhage in these cases seems no criterion for a favorable prognosis, as the symptoms are in all respects quite as dangerous and the skill of the physician quite as severely taxed to prevent a fatal issue. The general aspects and the duration of this variety of the disease are the same as the former.

As to the prognosis of hæmorrhagic fever, the fatal cases may be said to amount to about 50 per cent. During some seasons the fatality is much greater, depending upon the predisposing cause, one of which is the continued drouth during the hot season and a general prevalence of malarial fermentation. In an epidemic sense the disease is neither infectious nor contagious, although its presence in any locality generally excites more or less apprehension in the minds of the public. Although very malignant, it does not reach beyond the patient, and only one in a family may be subject, though several have been afflicted in succession. It is a disease of annual recurrence, and has been reported in different parts of the South as far as Panama, and some cases have been reported as far north as Indiana.

The treatment of hæmorrhagic fever is based upon general principles, but in the main must be heroic. Quinine and arterial stimulants are indispensable per orem, rectum, or hypodermically. Mercurials are wholly inadequate excepting as adjuvants, aiding the more powerful purgatives in relief of the overwhelmed kidney. It also relieves in part the obstinate reaction of the stomach, and thus furnishes a temporary relief to the distress of the patient. The latter symptom is also partially relieved by the repeated draught of a saturated solution of potassium bicarbonate, which remedy effects a rapid alkalinity of the blood. The most powerful cholagogue in the experience of the writer has proven to be acidum muriaticum dilutum, repeated every hour, and in grave cases every half hour, until moisture of the tongue. It is manifestly not to be used with mercurials. As a purgative, elaterium, either alone or with calomel, is the most effectual, though the frequent repetitions of oil, if tolerated, have proven salutary in arousing the alimentary function.

In conclusion, it may be added that it has been the privilege of the writer, during a residence in the South, to make a study of this re-

markable disease, the importance of which certainly deserves to be more extensively known, since it is undoubtedly becoming more prevalent in our country, and, owing to the constantly increasing facilities of rapid transportation, is becoming more liable to an extended distribution in localities beyond its former domain.

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BAD AIR AS A DISEASE PRODUCER.

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AN item in the daily press states that Professor Brown-Séquard has lately informed the French Academy of Science that he had, by condensing the watery vapor coming from human lungs, obtained a poisonous liquid capable of producing almost instant death. The unreliability that would naturally cling to any statement touching a technical subject as found in a newspaper would be more than counterbalanced by the reasonableness of the fact stated. To those practitioners who have, by force of circumstances, been forced to extract teeth as a side issue to the general practice, the discovery of Dr. Brown-Séquard will not appear unreasonable. Nor, indeed, will the extreme virulence be attributed to the presence of carbonic acid, whose presence in expired air has long been recognized. When this fact, if fact it be, becomes a matter of certain knowledge, it may be the forerunner to important discoveries concerning the origin and spread of infectious and contagious diseases. It is, at least, most reasonable, and when the relation which we know exists between respirable and irrespirable air is called to mind, the body is admitted to be an important battle-ground.

In the very laudable desire to discover, if possible, the causes that underlie the origin and aid in the spread of infectious and contagious diseases, sewers and water supply surely have had a monopoly of attention. Not that they do not merit all the care and supervision they receive, but may it not be possible that in noting the large evils we overlook smaller and apparently insignificant ones, which future investigation may find worthy of supervision and correction? Of the so-called filth diseases there can be no question but that any violation of the atmosphere, whereby it is rendered unfit for respiration, must be regarded as a cause of the disease. Bad sewers and bad drainage simply mean that the air is contaminated by being loaded with odors and gases arising from decaying vegetable and animal matter. Admitted, then, that these causes acting, can and do produce the diseases alluded to, and also aid in the spread of the diseases by lowering vitality, and thereby not only producing a disease but furnishing suitable soil for its full development, let us see what similar causes might do in more restricted quarters.

In investigating and attempting to track an epidemic of diphtheria, a few decaying potatoes in a damp cellar has satisfied many a board of health that the monster had been run to cover.

Did you ever hear of a board of health having a word to say about the old, filthy pipe that finds resting-place in so many houses? How common it is for the head of the family to sit down by the fireside of an evening and smoke an old pipe until the air of the room, and of all the rooms in fact, is so dense that you could almost hang your hat in mid-air. Especially is this state of domestic affairs likely to be found in the small houses of the working people. When at the most three small rooms comprise the living and sleeping rooms of these families, it will be seen that it will not take one vile pipe and a vigorous smoker long to so pollute the air as to render it unfit for a brute, and still less for a human being. In the winter season economy in fuel prevents almost all attempt at ventilation. Crowd three to six or more people into a couple of small rooms, shut off all outside air, supply and then fill the house with rank tobacco-smoke, and the system has an uphill contract on hand to get enough oxygen, and what a lot of chaff must be taken in to get the little wheat needed! Add to this vile atmosphere the smoke and odors of the cooking, and you have a state of affairs that is at once appalling. In time the inmates become yellow and smoke-cured. The children especially suffer, and when an epidemic is abroad what better place for it to anchor!

Then there is a state of domestic poisoning that is even worse than this. If added to this, as it often is, it is beyond computation, while if it is alone it is awful to contemplate. I refer now to the breath that so many people possess. Bad breath depends upon a very few causes. Bad teeth, abused stomach, and neglected

mouth comprise the causes that are easily remediable. That growing class who have catarrh in various stages of development may not be able to secure such treatment as their needs demand; but the man or woman who cannot afford to eat at meal-times and at regular stated periods, and also devote five minutes after each meal to the care of the teeth, must indeed be overworked. The price of a good, clean breath is eternal vigilance and a tooth-brush. When the truth of Dr. Brown-Séquard's discovery becomes generally known, may be a slight impetus to keep the mouth in a healthy condition will be given.

What makes bad breath, dismissing for the time those cases of catarrh which render the possessor a sort of moral skunk? The expired air as it leaves the healthy lungs can not and does not have the odor it is laden with when it passes out of the mouth. In a very large percentage of these cases the mouth and teeth are to blame. A filthy mouth, if it contaminates the expired air must also contaminate the inspired air, and it then follows that the foul-mouthed man not only breathes out bad air, but he also breathes it in, and in this fact there is some consolation, but the trouble is he is not forced to smell it, and while he is poisoning himself he does not know what a nuisance he is to those around him. A man who will not clean his teeth on the ground that it is only necessary for dudes and beaux to do that would not wash his face if he did not have to show it to the public. Think of the man who marries a nice, clean girl, and after the honeymoon is over adopts an old pipe and neglects his teeth! How soon his breath smells like a school-boy's slate! The children even avoid him, and the boys are mamma's boys, and the girls are mamma's girls, and he, after twenty years' devotion to the old pipe and as long neglect of the tooth-brush, has a breath that is a terror in its way, and those who know him sit on the windward side of him when he finds consolation in reminiscent pastimes.

A custom that is yet far from extinction is largely observed by women, and relates to the insane desire of a large majority of women to kiss little children, whose inability to resist makes them powerless victims. What there is about innocent childhood that suggests to the average female mind that the child should be kissed has not yet been reported to the academy of science. A woman who has a breath like a jackal has no more right to kiss a little child than she has to slap it for walking pigeon-toed. One of these days some legislative body will embalm itself in immortal memory by making it a penal offense for an old or a young woman to kiss a baby simply because of its alleged sweetness. Like the boy in the school-fight, let them take one of their size! Without a doubt many diseases are spread and many children rendered far from well by this kissing habit, which is very fine when properly observed, but very wrong when abused.

Sleeping-rooms are, as a rule, the poorest ventilated rooms in the average house. The havoc one inmate can work on several other occupants of a small room, with outside air closely excluded is very great. Especially is this state of affairs liable to be found among the poor, who are forced to economize in fuel, and in the end do economize in health. When medical men fully appreciate what a powerful factor in the causation of ill health impure air is, and when the source of impure air is looked for in the house and not around it, I feel very sure an important step will be taken in locating the cause of so many ailments that have heretofore escaped detection, or been ascribed to unreliable and uncertain causes.

SELECTED.

NOTE ON THE EFFECTS PRODUCED ON MAN BY SUBCUTANEOUS INJECTIONS OF A LIQUID OBTAINED FROM THE TESTICLES OF ANIMALS.

By Dr. BROWN-SEQUARD, F.R.S., Etc.

ON the 1st day of June last I made at the Société de Biologie of Paris a communication on the above subject, which was published in the Comptes Rendus of that society on June 21st (No. 24). I will give here a summary of the facts and views contained in that paper and in two subsequent ones, adding to them some new points.

There is no need of describing at length the great effects produced on the organization of man by castration, when it is made before the adult age. It is particularly well known that eunuchs are characterized by their general debility and their lack of intellectual and physical activity. There is no medical man who

does not know also how much the mind and body of men (especially before the spermatic glands have acquired their full power, or when that power is declining in consequence of advanced age) are affected by sexual abuse or by masturbation. Besides, it is well known that seminal losses, arising from any cause, produce a mental and physical debility which is in proportion to their frequency. These facts and many others have led to the generally admitted view that in the seminal fluid, as secreted by the testicles, a substance or several substances exist, which, entering the blood by resorption, have a most essential use in giving strength to the nervous system and to other parts. But if what may be called spermatic anæmia leads to that conclusion, the opposite state, which can be named spermatic plethora, gives as strong a testimony in favor of that conclusion. It is known that well-organized men, especially from twenty to thirty-five years of age, who remain absolutely free from sexual intercourse or any other causes of expenditure of seminal fluid, are in a state of excitement, giving them a great, although abnormal, physical and mental activity. These two series of facts contribute to show what great dynamogenic power is possessed by some substance or substances which our blood owes to the testicles.

For a great many years I have believed that the weakness of old men depended on two causes—a natural series of organic changes and the gradually diminishing action of the spermatic glands. In 1869, in a course of lectures at the Paris Faculty of Medicine, discussing the influence possessed by several glands upon the nervous centres, I put forward the idea that if it were possible without danger to inject semen into the blood of old men, we should probably obtain manifestations of increased activity as regards the mental and the various physical powers. Led by this view, I made various experiments on animals at Nahant, near Boston (United States), in 1875. In some of those experiments, made on a dozen male dogs, I tried vainly, except in one case, to engraft certain parts or the whole body of young guinea-pigs. The success obtained in the exceptional case served to give me great hopes that by a less difficult process I should some day reach my aim. This I have now done. At the end of last year I made on two old male rabbits experiments which were repeated since on several others, with results leaving no doubt as regards both the innocuity* of the process used and the good effects produced in all those animals. This having been ascertained, I resolved to make experiments on myself, which I thought would be far more decisive on man than on animals. The event has proved the correctness of that idea.

Leaving aside and for future researches the questions relating to the substance or substances which, being formed by the testicles, give power to the nervous centres and other parts, I have made use, in subcutaneous injections, of a liquid containing a small quantity of water mixed with the three following parts: First, blood of the testicular veins;† secondly, semen; and thirdly, juice extracted from a testicle, crushed immediately after it has been taken from a dog or guinea-pig. Wishing in all the injections made on myself to obtain the maximum of effects, I have employed as little water as I could. To the three kinds of substances I have just named, I added distilled water in a quantity which never exceeded three or four times their volume. The crushing was always done after the addition of water. When filtered through a paper filter, the liquid was of a reddish hue and rather opaque, while it was almost perfectly clear and transparent when Pasteur's filter was employed. For each injection I have used nearly one cubic centimetre of the filtered liquid. The animals employed were a strong and, according to all appearances, perfectly healthy dog (from two to three years old), and a number of very young or adult guinea-pigs. The experiments, so far, do not allow of a positive conclusion as regards the relative power of the liquid obtained from a dog and that drawn from guinea-pigs. All I can assert is that the two kinds of animals have given a liquid endowed with great power. I have hitherto made ten subcutaneous injections of such a liquid—two in my left arm, all the others in my lower limbs—from May 15th to June 4th last. The first five injections were made on three succeeding days with a liquid

* This innocuity was also proved on a very old dog by twenty subcutaneous injections of a fluid similar to that I intended to employ on myself. No apparent harm resulted from these trials, which were made by my assistant, Dr. D'Arsonval.

† For reasons I have given in many lectures in 1869 and since, I consider the spermatic as also the principal glands (kidneys, liver, etc.,) as endowed, besides their secretory power, with an influence over the composition of blood, such as is possessed by the spleen, the thyroid, etc. Led by that view, I have already made some trials with the blood returning from the testicles. But what I have seen is not sufficiently decisive to be mentioned here.

obtained from a dog. In all the subsequent injections, made on May 24th, 29th, and 30th, and June 4th, the liquid used came from guinea-pigs. When I employed liquids having passed through Pasteur's filter, the pains and other bad effects were somewhat less than when a paper filter was used.

Coming now to the favorable effects of these injections, I beg to be excused for speaking so much as I shall do of my own person. I hope it will easily be understood that, if my demonstration has any value—I will even say any significance—it is owing to the details concerning the state of my health, strength, and habits previously to my experiments, and to the effects they have produced.

I am seventy-two years old. My general strength, which has been considerable, has notably and gradually diminished during the last ten or twelve years. Before May 15th last I was so weak that I was always compelled to sit down after half an hour's work in the laboratory. Even when I remained seated all the time, or almost all the time, in the laboratory, I used to come out of it quite exhausted after three or four hours' experimental labor. and sometimes after only two hours. For many years, on returning home in a carriage by six o'clock after several hours passed in the laboratory, I was so extremely tired that I invariably had to go to bed after having hastily taken a very small amount of food. Very frequently the exhaustion was so great that, although extremely sleepy, I could not for hours go to sleep, and I only slept very little, waking up exceedingly tired.*

The day after the first subcutaneous injection, and still more after the two succeeding ones, a radical change took place in me, and I had ample reason to say and to write that I had regained at least all the strength I possessed a good many years ago. Considerable laboratory work hardly tired me. To the great astonishment of my two principal assistants, Drs. D'Arsonval and Hénocque, and other persons, I was able to make experiments for several hours while standing up, feeling no need whatever to sit down. Still more: one day (the 23d of May), after three hours and a quarter of hard experimental labor in the standing attitude, I went home so little tired that after dinner I was able to go to work and to write for an hour and a half a part of a paper on a difficult subject. For more than twenty years I had never been able to do as much.* From a natural impetuosity, and also to avoid losing time, I had, till I was sixty years old, the habit of ascending and descending stairs so rapidly that my movements were rather those of running than of walking. This had gradually changed, and I had come to move slowly up and down stairs, having to hold the banister in difficult staircases. After the second injection I found that I had fully regained my old powers, and returned to my previous habits in that respect.

My limbs, tested with a dynamometer, for a week before my trial and during the month following the first injection, showed a decided gain of strength. The average number of kilogrammes moved by the flexors of the right forearm before the first injection was about thirty-four and one-half (from thirty-two to thirty-seven), and after that injection forty-one (from thirty-nine to forty-four), the gain being from six to seven kilogrammes. In that respect the forearm flexors re-acquired, in a great measure, the strength they had when I was living in London (more than twenty-six years ago). The average number of kilogrammes moved by those muscles in London in 1863† was forty-three (forty to forty-six kilogrammes).

I have measured comparatively, before and after the first injection, the jet of the urine in similar circumstances—*i.e.*, after a meal in which I had taken food and drink of the same kind in similar quantity. The average length of the jet during the ten days that preceded the first injection was inferior by at least one-quarter of what it came to be during the twenty following days. It is therefore quite evident that the power of the spinal cord over the bladder was considerably increased.

One of the most troublesome miseries of ad-

* I ought to say that, notwithstanding that dark picture, my general health is and has been almost always good, and that I had very little to complain of, excepting merycism and muscular rheumatism.

* My friends know that, owing to certain circumstances and certain habits, I have for thirty or forty years gone to bed very early and done my writing work in the morning, beginning it generally between three and four o'clock. For a great many years I had lost all power of doing any serious mental work after dinner. Since my first subcutaneous injections I have very frequently been able to do such work for two, three, and one evening for nearly four hours.

† I have a record of the strength of my forearm, begun in March, 1860, when I first established myself in London. From that time to 1862 I occasionally moved as much as fifty kilogrammes. During the last three years the maximum moved was thirty-eight kilogrammes. This year, previously to the first injection, the maximum was thirty-seven kilogrammes. Since the injection it has been forty-four.

vanced life consists in the diminution of the power of defecation. To avoid repeating the details I have elsewhere given in that respect, I will simply say that after the first days of my experiments I have had a greater improvement with regard to the expulsion of fæcal matters than in any other function. In fact a radical change took place, and even on days of great constipation the power I long ago possessed had returned.

With regard to the facility of intellectual labor, which had diminished within the last few years, a return to my previous ordinary condition became quite manifest during and after the first two or three days of my experiments.

It is evident from these facts and from some others that all the functions depending on the power of action of the nervous centres, and especially of the spinal cord, were notably and rapidly improved by the injections I have used. The last of these injections was made on June 4th, about five weeks and a half ago. I ceased making use of them for the purpose of ascertaining how long their good effects would last. For four weeks no marked change occurred, but gradually, although rapidly, from the 3d of this month (July) I have witnessed almost a complete return of the state of weakness which existed before the first injection. This loss of strength is an excellant counter-proof as regards the demonstration of the influence exerted on me by the subcutaneous injections of a spermatic fluid.

My first communication to the Paris Biological Society was made with the wish that other medical men advanced in life would make on themselves experiments similar to mine, so as to ascertain, as I then stated, if the effects I had observed depended or not on any special idiosyncrasy or on a kind of auto-suggestion without hypnotization, due to the conviction which I had before experimenting that I should surely obtain a great part at least of these effects. This last supposition found some ground in many of the facts contained in the valuable and learned work of Dr. Hack Tuke on the "Influence of the Mind over the Body." Ready as I was to make on my own person experiments which, if they were not dangerous, were at least exceedingly painful, I refused absolutely to yield to the wishes of many people anxious to obtain the effects I had observed on myself. But, without asking my advice, Dr. Variot, a physician who believed that the subcutaneous injections of considerably diluted spermatic fluid* could do no harm, has made a trial of that method on three old men—one fifty-four, another fifty-six, and the third sixty-eight years old.† On each of them the effects have been found to be very nearly the same as those I have obtained on myself. Dr. Variot made use of the testicles of rabbits and guinea-pigs.

These facts clearly show that it was not to a peculiar idiosyncrasy of mine that the effects I have pointed out were due. As regards the explanation of those effects by an auto-suggestion, it is hardly possible to accept it in the case of the patients treated by Dr. Variot. They had no idea of what was being done; they knew nothing of my experiments, and were only told that they were receiving *fortifying* injections. To find out if this qualification had anything to do with the effects produced, Dr. Variot, since the publication of his paper, has employed similar words of encouragement, whilst making subcutaneous injections of pure water on two other patients, who obtained thereby no strengthening effect whatever.‡

I believe that, after the results of Dr. Variot's trials, it is hardly possible to explain the effects I have observed on myself otherwise than by admitting that the liquid injected possesses the power of increasing the strength of many parts of the human organism. I need hardly say that those effects cannot have been due to structural changes, and that they resulted only from nutritive modifications, perhaps in a very great measure from purely dynamical influences exerted by some of the principles contained in the injected fluid.

I have at present no fact to mention which might serve to solve the question whether it would be possible or not to change structurally muscles, nerves, and the nervous centres by making during a good many months frequent injections of the fluid I have used. As I stated at

* In my third communication at the Biological Society, I said that both the intense pain each injection has caused me and the inflammation it has produced would be notably diminished if the liquid employed were more diluted. The three cases of Dr. Variot have proved the exactitude of my statement. He made use of a much larger amount of water, and his patients had to suffer no very great pain and no inflammation.

† The paper of Dr. Variot and my remarks upon it have appeared in the Comptes Rendus de la Société Biologie, No. 26, 5 Juillet, 1889, pp. 451 and 454.

‡ Since writing the above I have received a letter from Dr. Variot announcing that, after injecting the liquid drawn from the testicles into these two individuals, he has obtained the same strengthening effects I have myself experienced.

the Paris Biological Society, I have always feared, and I still fear, that the special nutritive actions which bring on certain changes in man and animals, from the primitive embryonal state till death by old age, are absolutely fatal and irreversible. But in the same way that we see muscles which have from disease undergone considerable structural alterations regain sometimes their normal organization, we may, I believe, see also some structural changes not essentially allied with old age, although accompanying it, disappear to such a degree as to allow tissues to recover the power they possessed at a much less advanced age.

Whatever may be thought of these speculations, the results I have obtained by experiments on myself and those which have been observed by Dr. Variot on three old men show that this important subject should be further investigated experimentally.*—*London Lancet*, July 20, 1889.

ABSTRACTS.

PARAPLEGIA OCCURRING IN THE COURSE OF CHOREA MINOR.

AN interesting article upon this subject is contributed to Le Progrès Médical for May 11, 1889, by MM. Souza-Leite and E. Cherbuliez. The authors relate the histories of two cases which have come under their observation. The most careful description of this complication is due to Todd. Paralytic chorea, or limp chorea, as English writers have called it, is more rare in chorea than hemiplegia, or even monoplegia.

The first case was that of a saleswoman, aged twenty years, admitted to the Hôtel-Dieu, under the care of Prof. G. Sée, Aug. 16, 1888. The patient's father was a whimsical man, a cousin-german, was subject to epileptic fits, and her maternal grandfather had been addicted to drink. The patient had had a long and very severe attack of whooping-cough when between five and six years of age. From childhood she suffered from migraine, which became so severe when she was twelve or fourteen that, during a month, she was free from attacks but from five to seventeen days. She began to menstruate at the age of sixteen. During her eighteenth year she was treated for some ocular affection, and again, six months before admission, she had an attack of conjunctivitis. In March, 1887, she was seized with an affection of the throat, accompanied by the formation of a yellowish false membrane, slight fever, pains in the chest and head. This trouble continued for upward of forty days. Toward the end of April she was able to return to the shop in which she was employed. About this time she limped slightly upon the right leg. During July, her disposition began to change, she became sullen, and was easily vexed. Soon afterward it was observed that her arms twitched. At the end of August the spasms of the upper extremities became more accentuated, her head was jerked irregularly toward one or the other side, and her features contorted. During September these movements lessened rapidly, and at length had almost entirely disappeared. At the expiration of twenty days, however, a fit of vexation brought on a relapse. The movements of the upper extremities recurred, accompanied by almost complete paralysis of the lower limbs. There was slight anæsthesia of the left side. After some time gradual improvement again began. By the middle of January, 1888, she was able to walk with a crutch and cane, and by the end of February a cane only was needed.

The second patient was a laundress, aged eighteen years. Her paternal grandfather and grandmother were alcoholics. Her father was addicted to drink, and had suffered also from acute articular rheumatism. The patient had had inflammatory rheumatism and two attacks of pleurisy. Upon recovering from the second attack she took part in a violent family quarrel. The result was intense cerebral excitement and irregular spasmodic movements. She left home, was found, four hours later, wandering in the fields, and was brought back to the house with great difficulty. She remained for several days in a state of extreme mental excitement. Her head alternated from side to side like a balance, her face was contorted, and she had difficulty in swallowing and speaking. There was great muscular weakness in the lower limbs. Nineteen days after the domestic altercation she was suddenly seized with paraplegia. This continued for five or six weeks, when it had nearly disappeared. During the earlier part of this

* It may be well to add that there are good reasons to think that subcutaneous injections of a fluid obtained by crushing ovaries just extracted from young or adult animals, and mixed with a certain amount of water, would act on old women in a manner analogous to that of the solution extracted from the testicles injected into old men.

period a very loud and peculiar cardiac bruit could be discerned by the patient herself, and by the physician when standing at some distance. "It sounded as if a little chicken were hidden in her breast." Two or three weeks after the subsidence of the paraplegia she left the hospital. Two years later, upon attempting to resume her occupation, she became subject to joint pains, headache, jugular pulsations, together with elevation of temperature. She was readmitted to the hospital, but, although a cardiac murmur was present, the unique, adventitious sound had disappeared.

BROMIDE OF NICKEL IN EPILEPSY.

IN Le Progrès Médical for June 15 and June 29, 1889, Bourneville, editor-in-chief of the journal, gives an elaborate and extremely interesting clinical study of a case of idiopathic epilepsy. He appends the results of his experience with bromide of nickel in the treatment of idiopathic or symptomatic epilepsy.

The detailed history is that of a boy who had been healthy, though not rugged, until he reached the age of thirteen. Alcoholism and nervous disorders had been common among his progenitors for several generations. The first fit had occurred about twenty-four hours after a severe fright. A second fit, forty-eight hours later, was followed by a violent delirium. Four months later he was received into the Bicêtre. About twenty-one months after the first convulsion the lad died, probably of asphyxia. He suffered from a great number of paroxysms which generally occurred in series; after many fits, succeeding each other at short periods, an interval of comparative freedom would ensue. The attacks were complicated with intellectual disturbances, automatism, and traumatisms. During one series, in which fit succeeded fit, and in which there was but little manifestation of consciousness, the temperature was observed. On the 10th, 11th, 12th, and 13th of October, 1883, the rectal temperature stood at about 38° C. (100.4° F.). On the evening of the 14th, it attained 39.9° C. (103.8° F.), and remained at 40° C. (104° F.) during the 15th, 16th, and 17th. On the morning of the 18th, it stood at 40.6° C. (105.1° F.); in the evening, 39.3° C. (102.8° F.), from which it gradually declined. During the five months of 1883, during which the patient was under observation, he had four hundred and fifty-five fits; during 1884, nine hundred and twenty-one; and in 1885, until January 22d, the date of his death, he suffered from a number of spasms.

The autopsy did not account for the death. The lesions of meningitis or meningo-encephalitis were absent, and the abdominal and thoracic viscera were fairly healthy. The appearance of the lungs seemed to corroborate the theory of asphyxia.

In this case the bromide of nickel, far from effecting any improvement in the number and character of the spasms, seemed even to aggravate the disease. The author concludes with a brief enumeration of seventeen other cases in which the same remedy was employed. Six of these cases were idiopathic and eleven symptomatic epilepsy. In only one was marked success obtained. Here considerable benefit resulted within the first four months; the dose was then increased, with rapid improvement. For a year a few fits occurred each month. Finally they disappeared altogether, and for three years there has been no recurrence.

This experience, as M. Bourneville remarks, does not accord with that of Prof. J. M. Da Costa.

CEREBRO-SPINAL DECUSSATIONS.

DR. L. H. METTLER, in the New York Medical Journal, after noting the three schools at present existing in regard to cerebro-spinal localizations, resolves the great central nervous system into its component parts, comparing it, by way of illustration, to the more rudimentary nervous centres of articulates. Certain nervous foci or ganglionic masses controlling various parts of the body are always found in certain relatively fixed localities; but the marginal overlapping of these focal areas and their intercommunication by means of commissural fibres are so extensive as to render the central nervous system more of a unit in its action than would be inferred from some of the extreme views of the later followers of Ferrier and Luys. Many anomalous phenomena, noted in certain pathological states, a few of which the author cites, can only be explained in this way.

Some experiments by Brown-Séquard, as well as a number of reported cases by the same writer, are introduced to show that in a much

larger percentage of individuals than has been heretofore admitted the decussations of the sensory and motor tracts are not complete and always the same. Thus, in ordinary hemiplegia, the paresis frequently occurring on the opposite side is capable of two explanations: first, sympathetic disturbance of the corresponding parts of the opposite hemisphere; or, secondly, the presence of uncrossed fibres conveying impulses between the extremity and hemisphere of the same side. For many reasons the latter is the more plausible explanation.

While the recent advances in cerebro-spinal localizations and decussations are rapidly elevating neurology into the realm of more exact science, there is danger of too much hasty generalizing. The cerebro-spinal architecture needs to be studied anew to carefully avoid the superficial teachings of the older anatomists, and to prevent currency given to some of the extravagant notions of the latter-day theorists.

SYMPTOMS OF CHRONIC ARSENICAL POISONING.

AT the meeting of the Academy of Medicine of Paris, July 2, 1889, M. Brouardel read, in behalf of M. Gabriel Pouchet and himself, the result of their observations in certain medico-legal cases. When arsenic is given in small doses for a considerable length of time, four periods of intoxication may be distinguished. The first is that of digestive troubles. There is frequent vomiting, easily performed, and not accompanied by any pain or burning sensations. The vomited matter consists of mucus mixed with bile. Constipation is often present; diarrhœa is rare. The second period is marked by laryngo-bronchial troubles and by various eruptions. The rash may be vesiculur, vesiculo pustular, or urticated, and has no distinctive characteristics. In the third period nervous disorders make their appearance,—intense headache, numbness, painful cramps, etc. In the fourth period paralyses occur. The impairment of motion is but slight at first, but gradually becomes more pronounced. The facial muscles and the sphincters are not involved.

Cure is the rule in this form of arsenical poisoning. If death does take place, it occurs by heart failure.

M. Gautier stated that a description of this species of intoxication had already been given by M. Skolozuboff, who had had the opportunity of studying it in the inhabitants of Moscow. These people are in the habit, before going to bed, of dusting themselves with an insect powder, which is, in fact, arsenic.—*La Tribune Médicale*, July 4, 1889.

PAROTID EXCITO-SECRETORY NERVE.

M. MOUSSER reported to the Society of Biology, at the meeting, May 18, 1889, that he had recognized in the horse and in the ox the existence of an excito-secretory nerve to the parotid gland. It appears to be a branch of the trifacial, and stimulation of it provokes the flow through Steno's duct of a large quantity of salivary fluid—*La Tribune Médicale*, May 23, 1889.

THERAPEUTIC NOTES.

Continuation of prescriptions recommended by DR. JOHN V. SHOEMAKER, at his clinic for skin diseases, at the Medico-Chirurgical Hospital of Philadelphia:—

Eczema, Acute.

Take of Calomel, . . . 8 grains.
Powdered nutmeg, . ½ drachm.
Mix and divide into fifteen powders.
Dose: One powder three times a day.

Eczema, Acute.

Take of Tincture of rhus toxicodendron (poison ivy), 2 drachms.
Dose: One to two drops in water every two or three hours.

Eczema, Chronic.

Take of Sulphide of arsenic, . 1 grain.
Beta-naphthol, . . 24 grains.
Mix and divide into twelve pills.
Dose: One pill three times a day.

Eczema, Chronic.

Take of Fluid extract of hydrastis canadensis, . . 3 drachms.
Glycerin, . . . 5 ounces.
Mix. Dose: Two teaspoonfuls in water three to four times a day.

Eczema, Chronic.

Take of Sirup acidi hydriodici, . 4 ounces.
Dose: One teaspoonful in water three to four times a day.

Eczema, Chronic.

Take of Iodide of iron, . . 40 grains.
Arsenite of sodium, . . 1 grain.
Mix and divide into twenty pills.
Dose: One pill three times a day.

Eczema, Chronic.

Take of Cod-liver oil, . . . 10 ounces.
Oil of gaultheria, . . 10 drops.
Mix and make into an emulsion.
Dose: One tablespoonful three times a day.

Eczema, Chronic.

Take of Iodide of potassium, . 200 grains.
Aloin, ... 2 grains.
Sirup of sarsaparilla, . 5 ounces.
Mix. Dose. Two teaspoonfuls in water three times a day.

Eczema, Infantile Acute.

Take of Pepsin, ... 36 grains.
Subnitrate of bismuth, . 36 grains.
Powdered nutmeg, . 4 grains.
Mix and divide into twelve powders.
Dose: One powder after feeding three or four times a day.

Eczema, Infantile Acute.

Take of Antamonial wine, . . 24 drops.
Cinnamon-water, . . 3 ounces.
Mix. Dose: One teaspoonful from three to four times a day.

Eczema, Infantile Chronic.

Take of Sublimed sulphur, . 2 drachms.
Glycerin, . . . 3 ounces.
Mix. Dose: From one to two teaspoonfuls night and morning.

Eczema, Infantile Chronic.

Take of Sirup of lactate of iron, 3 ounces.
Chlorate of potassium, . 1 drachm.
Mix. Dose: One-half to one teaspoonful three times a day.

Eczema Genitalium—Eczema of the Genital Organs, Acute.

Take of Antimonial wine, . . 2 drachms.
Spirit of nitrous ether, . 3 ounces.
Solution of acetate of ammonium, . . 3 ounces.
Mix. Dose: Two teaspoonfuls in water every three hours.

Eczema Genitalium—Eczema of the Genital Organs, Chronic.

Take of Copaiba, . . . 40 grains.
Venice turpentine, . 5 grains.
Extract of belladonna, 3 grains.
Mix and divide into twenty pills.
Dose: One pill three to four times a day.

Eczema Genitalium—Eczema of the Genital Organs, Chronic.

Take of Chaulmoogra oil, . . 1 ounce.
Dose: Ten to thirty drops in milk three to four times a day.

Eczema Vulvæ vel Vaginæ—Eczema of the Vulva or Vagina.

Take of Lupulin, ... 50 grains.
Camphor, ... 2 scruples.
Mix and divide into ten suppositories.
Dose: Insert one in the vagina when necessary to quiet the system and relieve the itching.

Eczema Ani—Eczema of the Anus.

Take of Fluid extract of witch-hazel, . . . 2 ounces.
Glycerin, . . . 2 ounces.
Mix. Dose: From one-half to one teaspoonful night and morning. Rectal injections of the same combination can be made with advantage once or twice a day.

Eczema Ani—Eczema of the Anus.

Take of Mercury with chalk, . 12 grains.
Divide into four powders.
Dose: Take in divided doses during twenty-four hours and follow with a saline.

Eczema Scroti—Eczema of the Scrotum.

Take of Sulphide of calcium, . 10 grains.
Extract of belladonna, 3 grains.
Arsenious acid, . . 1 grain.
Mix and divide into twenty pills.
Dose: One pill three times a day.

Eczema Crurum—Eczema of the Legs.

Take of Fluid extract of witch-hazel, . . . 3 ounces.
Dose: From ten drops to a teaspoonful in water three times a day.

Eczema Manuum et Pedum—Eczema of the Hands and Feet.

Take of Protiodide of mercury, . 5 grains.
Extract of ignatia, . 2 grains.
Extract of dandelion, . 20 grains.
Mix and divide into twenty pills.
Dose: One pill three to four times a day.

POWDER-STAINS ON THE SKIN.

The bluish-black spots produced by gunpowder may be removed by painting with the following solution:—

Biniodide of ammonium,
Distilled water, equal parts.

Then with dilute hydrochloric acid to reach the tissues more deeply affected.

—*Revue de Thérapeutique; Times and Register.*

FOR SUMMER DIARRHŒA.

℞ Tinct. hydrastis, . . . ʒj.
Potas. carbonat., . . 3j.
Syr. rhei aromat., . . ʒvij.
M. Sig.: Half-ounce every four hours.

—*Waugh.*

MENTHOL IN PRURITUS.

℞ Menthol, . . . gr. xxii–xxxvij.
Alcoholis, . . . fʒiss.
M. ft. lotio.

℞ Menthol, ... gr. xxxvij.
Olive-oil, ... fʒii–iij.
Lanolin, ... ʒiss.
M. ft. unguent.

℞ Menthol, ... gr. xlviij.
Balsam of Peru, . . . gr. xcvij.
Benzoated oxide of zinc,
Lanolin, pure, . āā ad ʒij.
M. ft. unguent. For use in scabies.

—Dr. Saalfeld in *Deutsche Med. Wochenschrift.*

HÆMOSTATIC COLLODION.

℞ Collodion, ... 100 parts.
Phenic acid, . . . 10 "
Tannin,
Benzoic acid, . . āā 5 "
Apply with a camel's-hair brush.

—Dr. Paresi in *Revue de Thér. Méd. Chir.*

SYPHILIS.

Soukhoff, in the Pharmaceutische Zeitung, recommends injections of vermilion instead of the mercury preparations usually employed for subcutaneous injections. He claims the following advantages for this new method: non-irritability, absence of pain, excellent effect. He used the following formula:—

℞ Cinnaboris, ... 3j.
Ol. amygdalæ, ... ʒj.

If his experience should be confirmed it would, perhaps, be even more advantageous to replace the red crystallized sulphide of mercury called vermilion by the black sulphide of mercury, which may be prepared as a much finer powder, and which formerly used to be an important constituent of the pharmacopœia of our forefathers under the name of Æthiops mineralis.—*The Provincial Medical Journal.*

SYCOSIS.

The most effective treatment of sycosis of the beard is said to consist of inunctions of iodoform lanolin. Alfred Loech, in the Deutsche Med. Zeit., recommends the following formula:—

℞ Iodoform precipit., . . . 3j.
Lanolin, ... ʒj.
Ft. unguent.

A small piece of this ointment is every evening rubbed into the affected parts, the beard having previously been washed with hot water.

—*Ibid.*

DERMATITIS.

℞ Acid. carbol., . . . gr. x.
Ol. olivæ,
Ol. terebinth., . . āā ʒss.
M. ft. linimentum.

—*Ibid.*

PHTHISIS.

℞ Atropinæ sulph., . . . gr. ⅓.
Morphinæ sulp., . . gr. ij.
Tinct. iodi., . . . fʒiij.
Acidi carbol., . . . gtt. xx.
Glycerini, ... fʒiss.
Spir. vini rect. (dil. 20–30 per cent.), . . . fʒiss.—M.

Use as intra-pulmonary injections. Fifteen minims of this solution are injected to a depth of one and one-half to two inches.

—Dr. Vincent Y. Bowditch in the *Boston Medical and Surgical Journal*, May 9, 1889.

SYRUP OF TAR.

Take of Oil of tar, dark, . . fʒss.
Magnesia, carbonated, . ʒss.
Sugar, granulated, . . ʒxiv.
Hot water, . . . q.s.

Rub the oil with the magnesia and two ounces of the sugar, and add gradually eight ounces of water. Allow the mixture to stand twelve hours and filter. In the filtrate dissolve the rest of the sugar without heat.

—Mr. F. W. Haussmann in the *Pharmaceutical Era*, June, 1889.

CREASOTE EMULSION.

℞ Oil of sweet almonds, . fʒv.
Beechwood creasote, . . fʒij.
Mix, and add—
Gum arabic, . . . ʒiij 3v.
Mint-water, ... fʒxvj.
M. Sig.: Give from two to five soupspoonfuls a day.

—Dr. Charles Eloy in the *Gazette Hebdomadaire*, May 10, 1889.

PARALDEHYDE IN ASTHMA.

℞ Tinct. ipecac. comp., . . gtt. xvj.
Sp. ammon. aromat., . . 3j.
Paraldehyde, . . . 3ij.
Sodii nitrit., . . . gr. v.
Aquæ menth. pip., . q.s. ʒj.
M. Sig.: Teaspoonful in sweetened water every half-hour till relief is obtained.

—R. T. Scott, M.D., in *Times and Register.*

RECTIFIED ESSENCE OF TURPENTINE IN CROUP.

Dr. Lewentaner, of Constantinople, reports four cases of idiopathic croup, when the symptoms were so severe as to afford but little hope for recovery. As in each case tracheotomy was refused, he determined to follow the treatment of Dr. Demolow, and administered the rectified essence of turpentine in tablespoonful doses. The symptoms promptly ameliorated and recovery followed in each instance. He also makes use of the following spray:—

℞ Essence of rectified turpentine,
Tinct. of eucalyptus, āā 4.0
Phenic acid, . . . 300.0
Alcohol, ... 300.0
Distilled water, . . . 1000.0

To be used in atomizer night and day.

—*Bulletin Général de Thérapeutique; ibid.*

FATTY DEGENERATION OF THE HEART (KISCH).

℞ Powdered rhubarb-root,
Extract of aloes, . āā 2 gram.
Extract of jalap,
Extract of trefoil, . . q.s.

Make thirty pills, one to be taken at night.

If anæmia co exist the following pills are useful:—

℞ Sulphate of iron (very pure), 3 gram.
Aqueous extract of aloes, . 2 gram.
Extract of trefoil, . . q. s.

Make thirty pills. Take one pill night and morning.

In addition, a diet calculated to excite urinary secretion should be ordered.

If indications of a sluggish circulation should be present, digitalis is indicated in combination with a purgative.

℞ Powder of rhubarb-root,
Aqueous extract of aloes,
Powdered digitalis, . āā 2 gram.
Extract of trefoil, . . q. s.

Make thirty pills. One every three hours. At the same time, and in order to increase the cardiac energy, wine or spirits should be administered, but cutaneous injections of ether may also be employed.

—*Revue de Thérapeutique; ibid.*

INCONTINENCE OF URINE IN CHILDREN (DESCROIZILLES).

℞ Sulphate of strychnine, . 0 gr. 05.
Syrup, ... 96 gr.
Water, ... 4 gr.

M. To be given in tablespoonful doses, one to twenty a day.

℞ Strychnine, . . . 0 gr. 05.
Conserve of red roses, . 2 gr.

Divide into twenty pills. Take one to four a day.

℞ Ergot of rye, . . . 2 gr.

Divide into ten parts. One to three a day.

℞ Ergotine, ... 2 gr.
Powdered licorice,
Syrup, . . . āā q. s.

Divide into twenty pills. Two to five a day.

℞ Bark and leaves of rhus aromaticus toxicodendron, . 200 gr.
Alcohol at 800, . . . 800 gr.

Prepare by displacement. A tincture will be obtained of which the dose will be from ten to sixty drops a day.

—*La Bulletin Médicale; ibid.*

INJECTION FOR UTERINE CANCER (CHERON).

℞ Tincture of iodine, . . ℥ss.
Salicylate of soda, . . ℥iiss.
Tar-water, ... Oss.

Dissolve. Three to six spoonfuls in a pint of warm water.

—*La Gazette Médicale de Montréal; ibid.*

NASAL CATARRH (GARAGEORGIADES).

℞ Pulverized iodoform,
Powdered acacia, . āā 2 gram.
Hydrochlorate of cocaine, . 0 gr. 15.

M. Sig.: Use as a snuff.

—*Ibid.*

TREATMENT FOR EXCESSIVE MENSTRUATION (RHEINSTADTER).

℞ Ergotine dialyzed, . . 10 gram.
Distilled water, . . . 70 gram.
Glycerin, ... 20 gram.
Salicylic acid, ... 0 gr. 2.

M. Sig.: One teaspoonful diluted with three tablespoonfuls of water, to be injected into the rectum once a day after a stool.

—*Ibid.*

INFANTILE DIARRHŒA (CRITZMAN).

℞ Salicylate of bismuth, . 1 to 2 gram.
Laudanum of Sydenham, . . . 1 to 5 drops.
Infusion of tea, . . 60 gram.
Syrup of raspberries, . 20 gram.
Rhum, ... 15 to 20 gram.

M. Sig.: One teaspoonful every two hours.

Or,—

℞ Lactic acid, . . . 2 gram.
Distilled water,
Syrup of raspberries, . āā 50 gram.

M. Sig.: One teaspoonful every half-hour.

—*La Tribune Médicale; ibid.*

THE
Medical Bulletin.

JOHN V. SHOEMAKER, A.M., M.D., Editor.
F. A. DAVIS, Publisher.
S. C. BERGER, Business Manager.

Philadelphia, Sept., 1889.

REJUVENATING INJECTIONS.

THE medical sensation of the hour is the communication recently made by Professor Brown-Séquard to the Biological Society of Paris. The illustrious French scientist has been engaged for many years in studying the physiological effects of fluids obtained from various organs by trituration or expression. The testicles have engaged his special attention. As long ago as 1869, he tells us, he began his investigations upon the effects of the generative glands and their secreted fluid. The outcome of his experiments is the subcutaneous injection of the fluid obtained by triturating the testes of the rabbit or guinea-pig. The fluid is diluted by the addition of a little distilled water. He has made himself the subject of his own experiments, and states that such injections are followed by a remarkable increase of vigor. The professor is himself upward of seventy years of age, but as a result of his self-administered treatment he feels, in effect, thirty or forty years younger. His organs and tissues have been stimulated into unwonted activity. He finds himself able to endure severe physical exertion without undue prostration or fatigue. His powers of mental application have been wonderfully renewed. Torpor of the large intestine and bladder has vanished, and his excretory functions are now easily and satisfactorily performed.

Such is a brief account of the startling announcement made by the Parisian savant. We seem almost transported to mediæval times, when men of thought and learning were devoted to the search for the elixir of life and the philosopher's stone. It were unworthy of the age, the position, and the services of Brown-Séquard, however, to misrepresent or misconceive his statements or to meet them with easy derision. It is never safe to condemn any proposition without subjecting it to practical tests. Prof. Brown-Séquard gravely declares, at the session of a scientific body, that he has employed practical tests in his own person to his very great advantage. It remains, therefore, for physicians to assure themselves by definite trials whether the proposed injections are, or are not, followed by notable reinvigoration. The trials should be made in such manner that the result may not be questioned or invalidated as being effected by expectant attention or suggestion. We know what startling temporary success attended the use of Perkin's tractors a century or so ago.

The subject is seriously proposed and should be seriously received. There is nothing commendable or philosophical in treating it with ridicule or quiet contempt. "Fair play is a jewel." When physicians consider the circumstances which accompanied the introduction of ovariotomy and anæsthetics, they should dread prejudgment. Both those beneficent innovations were solemnly and severely condemned by the profession and journals of this city.

The daily papers have devoted a considerable amount of space to the consideration of the subject. It is to them, if we mistake not, that we owe the phrase, elixir of life, given to the procedure. From this source we obtain information that physicians in various places are beginning to experiment upon the aged and decrepit. We shall await the reports of reputable observers to their professional journals and societies.

MEDICAL EXPERT TESTIMONY.

THIS is a subject which calls loudly for revision. We waive the question here as to whether any distinction should be made between testimony as to matters of fact and of professional knowledge, and as to whether every physician who goes upon the stand should necessarily be considered an expert witness. But what we have particularly in mind is the position occupied by opposing experts in homicide and lunacy cases. This is truly a deplorable spectacle and an opprobrium to the medical profession. A subject which involves learning of various kinds, chemical, microscopical, pathological, or diagnostic, is brought

before a court of law, each side presents its medical witness and often the scientific evidence offered is directly contradictory. We have no intention of being accusatory. Medical testimony is often clear and convincing to both court and jury. The expert is often truly authoritative. But the system seems to us at fault. Why is not the expert recognized as an adviser of the judge, and not called in the interest of either side? The testimony should be offered in public court, and be at the service of judge, counsel, and jury alike. Needless to say, such a medical official should be of the first rank for learning, judgment, and honor.

Certainly, cases requiring such testimony are those in which arise problems over which judgment may well hesitate. But this hesitation depends upon scientific grounds, and not upon any other consideration whatsoever.

Scarcely a homicide case, or one involving the question of insanity, comes to trial in these times without a sparring between counsel, based upon conflicting medical opinions. It seems to us that it is unfair to the prisoner, the community, and the medical profession.

We speak, of course, from a physician's standpoint, having no knowledge of legal matters. But the subject is full of mortification to the profession, and we believe that its most enlightened members would gladly see some more dignified system introduced. The office of the medical expert witness is solely to state what he conceives to be the truth, after honest effort to form an unbiased opinion by the employment of every means which the present state of science has placed at his command. More than this no finite mind can do.

In the German Empire and Austro-Hungary medico-legal cases are referred to a special tribunal. We have from time to time published illustrations of this method of examination, taken from the proceedings of a court advised by no less distinguished a physician than Professor Krafft-Ebing, of Graz.

RECENT CLINICAL AND PATHOLOGICAL STUDIES IN TYPHOID FEVER.

THE wide prevalence of typhoid fever, its prolonged course, the extreme prostration that it causes, and the fact that it, in the majority of cases, attacks individuals in the prime of their strength, combine to render this disease a fruitful subject of study. Its symptomatology and therapeutics, accordingly, are minutely considered by medical teachers. Certain well-recognized complications are frequently met with in grave cases, while the nutrition of the great nervous centres is so profoundly affected that various morbid conditions follow in its train. A number of the rarer sequelæ have of late been made the subject of renewed observation, and a recent number of our valued contemporary, Deutsche Medizinal Zeitung (July 22, 1889), is largely occupied with the results of these researches.

Some albumen is detected in the urine of about one-fourth the number of typhoid fever cases. As a rule, however, this disappears with convalescence, and is followed by no structural change in the kidneys.

Occasionally symptoms due to invasion of the kidneys are so pronounced that some German authorities have described such cases as constituting a form of the disease, to which they have given the name "nephrotyphus." Again, a genuine acute nephritis sometimes develops as a sequel of typhoid fever. It may make its appearance during or soon after the period of defervescence. Smoke-colored albuminous urine, blood-casts, œdema, which may, however, be inconsiderable, stupor, cramps, and spasms, point unmistakably to an inflammatory process involving the kidneys. Such a case has been reported by Dr. Demuth, of Frankenthal. The patient was a man, aged twenty-eight years, who, during an epidemic of typhoid fever, suffered from a case of apparently moderate severity. As soon as the temperature had fallen to normal he was attacked by albuminuria. Some œdema was present, tube-casts were found, the secretion of urine was almost entirely suppressed, painful tremors were succeeded by epileptiform convulsions, and the patient died upon the sixth day after the development of nephritic symptoms. Dr. A. Geier has had the opportunity of studying at the Louisa Hospital of Heidelberg, during the rage of an epidemic, twenty-five cases of typhoid fever in children, in which albuminuria presented itself as a complication. It began early in the second week, and its dura-

tion was variable, but generally from one to two weeks. He considers nephritis as apt to occur in the enteric fever of children as of adults, but not so likely to lead to renal insufficiency, and that a special renal form of typhoid fever is never found in children. He makes the significant statement that scarlet fever establishes a predisposition to the development of complicating nephritis if the child be attacked by typhoid fever after no long interval. Finally, he concludes that in all cases the albuminuria is due to the operation of the same cause which had produced the fever and the nervous symptoms, that is, intoxication of the system by the poison derived from the bacillus typhosus.

Dr. Emanuele Sacchi has published an article based upon his observation of eleven cases of osteo-periostitis occurring in the train of typhoid fever. This is a very rare sequela in this country. Sir James Paget has met with a number of cases in England. The inflammation, in the United States and England, appears to seldom terminate in the formation of a pus-cavity or in necrosis of the bone. These ill results are perhaps more common upon the continent of Europe. The author dwells at considerable length upon the destructive terminations and their avoidance. Some surgeons recommend an expectant treatment, endeavoring, in the first place, to prevent suppuration, and, in the second place, if that be not possible, to await a spontaneous opening of the abscess. Others prefer active surgical interference, and counsel incision into the periosteal swelling in order to relieve tension and pain and shorten the inflammatory process. Dr. Sacchi, however, after a consideration of all the evidence, thinks it best to avoid surgery, except when pus needs to be evacuated or a sequestrum removed. In the beginning of the affection he advises cold-water dressings, containing corrosive sublimate (1 : 1000), or carbolic acid (1 : 100), fixation of the limb, and, at a later period, painting with the tincture of iodine, and friction with gray salve. Internally a tonic course is necessary, but the author warns us to be cautious in the selection of diet in view of the fact that recurrence of the febrile state may be very readily brought about by dietetic indiscretions.

Periostitis usually attacks the tibia, although cases have been recorded in which the femur, the ulna, and the parietal bone were the seat of disease. Dr. Demuth, in the same communication to which we have already referred, narrates a case in which the humerus became involved. His patient was a man, sixty-seven years of age, in whom, during the fourth week of a typhoid fever, the temperature declined to normal and so remained for two weeks. At the end of that period the man began to complain of localized pain in the upper third of the arm. Diffuse swelling, with redness of the skin and moderate fever, followed. Fluctuation was before long detected, and a deep incision was made, giving exit to an inconsiderable quantity of pus. Exfoliation of small pieces of bone occurred during the week following the operation, but recovery was complete at the end of two months from the beginning of the attack of periostitis.

Dr. Rowland Humphreys has contributed to the British Medical Journal an account of a case in which peripheral neuritis occurred in the fourth week of typhoid fever. The patient was a three-year-old girl. Both lower extremities were affected, and it was four weeks from the onset of the attack before the child was able to take a few steps without support. After the lapse of eight weeks all the muscles reacted to the interrupted current except the left tibialis anticus and obliquus externus abdominis.

Dr. Ugo Bassi relates in L'Osservatore the history of a mason who was attacked during convalescence from typhoid fever by multiple neuritis. This disorder, in rare instances, appears as a sequela. Anatomically it is characterized by parenchymatous or interstitial inflammation of nerve-fibres. This process is not continuous, but diseased alternate with healthy sections. Perturbations both of sensation and motion are produced. The seizure may either be abrupt or gradual in its inception. The principal symptoms are due to sensory disturbances. The diseased parts are commonly œdematous, the skin is cyanotic and cold to the touch, and symptoms due to vasomotor alterations are also present. The duration of the affection is from two to six months and the prognosis is generally unfavorable.

An original and suggestive course of investi-

gations, with a practical bearing upon the etiology of the disease, has been conducted by Dr. W. Hesse. Convinced that many pathogenic germs obtain entrance into the organism, not only through the medium of the air respired and the water imbibed, but also through the food consumed, he experimented with various common foods in order to ascertain their properties as possible vehicles of infection, or, in other words, their qualities as culture-mediums. Pork, raw and cooked, rice cooked in meat-soups, boiled potatoes, sausage, cheese, bread, pea-soup, turnips, eggs, and French beans are some of the substances with which experiments were made. The majority of these articles furnished more or less favorable mediums for the growth of germs. Of thirty selected aliments at least twelve proved to be good culture-mediums for typhoid-fever germs.

An interesting observation has been published by Eberth. He examined the fresh fœtus from a woman who had aborted in the fifth month in consequence of typhoid fever, and found typhoid bacilli in blood taken from the heart, in the juice expressed from the lungs and spleen. This discovery agrees with the observation quoted by Murchison from Manzini, who reported a case in which lesions similar to those of typhoid fever were found in a seventh-month fœtus, which died within half an hour of its birth.

Dr. E. Sehrwald, docent in Jena, has published the results of researches upon the disinfecting virtues of naphthalin. This work has an important bearing upon the value of the substance as an internal therapeutic agent in typhoid fever. His studies were conducted by means of many cultures and experiments upon animals. He found that at the ordinary temperature of a room naphthalin exerted a slight inhibitory power upon the development of typhoid-fever bacilli. When the temperature was elevated to that of the body its influence upon all septic organisms was greatly intensified. It appeared, moreover, to be particularly destructive when converted into the gaseous form. The conditions favorable to the activity of naphthalin exist much more perfectly in the intestinal canal than in the flask of the experimenter, both by reason of the natural heat of the bowel and its peristaltic motions. Naphthalin is an energetic disinfectant of typhoid stools. When calomel has been administered the germs which escape its action succumb to that of naphthalin. The author consequently recommends the combined exhibition of calomel and naphthalin in enteric fever. A portion of the naphthalin administered is absorbed, transformed within the body, and eliminated by the urine. The products of transformation present in the blood and urine have no destructive influence upon typhoid-fever germs.

Dr. Mitchell Clarke, in the British Medical Journal, praises Beta-naphthol in the treatment of typhoid fever. Since it is insoluble, and consequently unabsorbable, its action must be purely local. It has the power of restraining the growth and development of the bacillus typhosus. Dr. Clarke has found it to shorten the course of the disease, prevent enlargement of the spleen, avert albuminuria and other complications, and secure a more favorable convalescence. It also lessens the danger of the spread of the disease, since it destroys the infectious material discharged by the bowels. He acknowledges that in some cases the remedy occasions gastric disturbance.

CORRESPONDENCE.

Mr. Editor:—

SIR: As my article on "An Unusual Case of Extra-Uterine Pregnancy" was originally published in the MEDICAL BULLETIN, I desire to notice the use which has been made of it by Dr. Strahan, in his essay which gained the Jenks prize recently, which has to day been shown me.

Dr. Strahan's book is simply a defense of the ideas held by Tait, of Birmingham; in fact, if what is cribbed from Tait's book on the subject was left out there would be nothing to read. I don't know how accurate the extracts quoted from others are in Strahan's monograph, but I do know that he has so garbled and remodelled my article of May, 1885, and invented so much to suit his own plans for knocking them down and attributing them to me, as to render what I did say unintelligible to those who might read the alleged "quotations" from my paper referred to. The pregnancy in the case narrated by me was tubal; there was no guesswork about it; three distinguished gynæcologists confirmed my diagnosis; the uterus was empty, as proved by introducing the sound to the fundus, and displacing the womb to the extreme left pelvic fossa; the ectopic mass being simultaneously

grasped and held in the right iliac region, and this done several times for several weeks by competent obstetricians. The uterus did not "seem" to be empty as Strahan says,—it was empty. There never was a "lump in the groin," as he says,—there was a tumor in the right iliac region, and that tumor was in the Fallopian tube, as I know and so reported it.

His criticisms on my repeated soundings are stupid and inert, for as the cavity of the uterus was empty no injury could result. I don't sound pregnant uteri for diagnostic or any other purposes. The electrical treatment failed, for reasons fully given in the article written by me, which Strahan takes good care not to notice,—they don't help his views. I have successfully treated nine cases of extra-uterine pregnancy, all of which except one were diagnosed by more than one competent diagnostician, and I know that in the exception under faradism a growing mass was arrested in development, the symptoms invariably recognized as alone due to pregnancy ceased, and the tumor was absorbed thereafter by galvanism.

I am not overly enthusiastic about electricity in medicine. I decline to treat many cases with it which come or are sent to me because, in my opinion, they are unsuitable; but I know that electrolysis properly used will arrest ectopic gestation, as I advise it in the articles contributed to various journals in some twelve years past. Dr. Strahan is evidently ignorant of the elementary principles of electro-physics, and of electrolysis as used against extra-uterine pregnancy. He shares with his associates in Great Britain and Ireland the inability to diagnose the condition, hence he condemns many women to the risks of laparotomy unnecessarily, and as electricity scientifically employed in a suspicious case cannot injure the woman at all, much less endanger her life as section does, he is a bad teacher despite his arrogance and self-assumed authority.*

His English and grammer are laughable at times (he's *not* "English you know!"), his anatomical ideas are peculiar, and his reasoning is open to objection even if the cases quoted from reports are correctly given, which is not at all likely if the manipulation of mine is a criterion.

The College of Physicians was jubilant over his essay if the preface can be relied on, but it would be a good idea to consult the authorities quoted by Dr. Strahan if he grabs for another prize in any future competition. What awful stuff the other poor essayists must have sent in if this was worth the money it cost!

WILLIAM R. D. BLACKWOOD.
246 NORTH TWENTIETH STREET, PHILA.

* Dr. Joseph Price has kindly invited me to see a case diagnosed as extra-uterine pregnancy at the Gynacean Hospital since writing the above, and the diagnosis was confirmed this morning by section.

CASES WHICH TROUBLE US.

To the Editor of the Medical Bulletin:—

SIR: We have had quite a lively time over Caucasus Coromandel and his alopecia, because he really was in a bad fix in consequence of the awful dose of salivation which we administered to him in our effort to cure what we innocently thought was a masked syphilis. He is naturally somewhat indignant over the terrible slobbering which he had put up with for nearly a week, and his teeth are not quite reliable as cutting instruments yet; they are rather loosely attached to their sockets for active exercises; we are, however, fortunate in having in his case a quiet kind of a person to deal with. He is not likely to give us trouble, such as Sophronia and Mrs. McSquiggan threatened, and we are greatly rejoiced thereat. An exceedingly interesting new patient has been under our care for several days, who has a hard, syphilitic node on his vertex, and who has only now been coaxed to let us remove it with the surgical engine. We shall operate upon him in presence of several gentlemen (and the only lady who has so far interviewed us concerning the working of our Great Improvidential Expensary and Poor Doctors Take What You Can Get Consolidation), and we shall of course send a full account of this really hazardous operation.

P. S.—Upon making the incision in the scalp so as to reflect a flap, a singular creamy substance exuded, and when the revolving burr was applied with considerable force, a perfect deluge of matter flew out in all directions, but more particularly toward our lady visitor whose new spring dress was, we fear, ruined.

P. S. (No. 2).—The lump was not a node after all, but how were we to be sure about this point? What, Mr. Editor, will take out the stain from the young lady's clothes? She is not able to afford another suit for a long time to come, as she has spent all her funds for tuition, and she is in very poor circumstances. How will we ever establish a reputation for our place if we continue to have such bad luck? We are almost certain that the "Head Doctors" are not any better posted than we are ourselves, but when such a *faux-pas* occurs (and it is likely to come along most any time) these would-be prominent consultationists leave us poor chaps to get out as best we may.

To make the matter worse the surgical engine does not belong to us, and we find that in some way it has been put out of order, yet we are not justified in paying for repairs unless the instrument-maker would do the work on tick, because the cashier has notified us to be very economical, as the funds are at low-water mark. Poverty is not a fault, not by any means, but it is extremely disagreeable in such an institution as ours, for

(this is strictly confidential) it is all that we can do to have the rent saved up by the time the landlord comes round, and he will undoubtedly fire us out if the cash is not forthcoming. We are solemnly considering the advisability of reducing the fee to fifteen cents, or two for a quarter. We are awfully despondent, and you need not be surprised at any time to learn that the place is in the hands of the sheriff.

N. B. No more at present, from yours despondently. BIZ.

171717 AVENUE (which is above Phil Bert).

THE INJECTION OF THE FLUID FROM THE TESTICLES RECOMMENDED BY DR. BROWN-SEQUARD.

To the Editor of the Medical Bulletin:—

SIR: Will you kindly send me the formula for "Brown-Séquard's Elixir of Life," so called, or can you inform me where I can get it?

Please oblige me if you can, and address Bryan, Williams County, Ohio.

Yours, truly, O. L. DALES, M.D.

ALLIANCE, OHIO.

[We refer our correspondent to one of Dr. Brown-Séquard's papers, reprinted in this issue of the MEDICAL BULLETIN. The fluid for injection should be prepared according to the method laid down by the eminent physiologist in his contribution. A well-equipped laboratory, it appears to the editor, is necessary in which to conduct the experiments, and not carry them on in a haphazard manner, as physicians are now attempting all over this country. No one can expect or even hope to repeat Dr. Brown-Séquard's experiments without being well equipped with the facilities. The eminent physiologist before having his experiment condemned, as has been done by many, and especially the daily press, should have his method carefully and systematically inquired into by investigations in the laboratory. The method of buying testicles of dead animals in the market, or from dealers, as has been done in Philadelphia by many, and from this material making a solution and injecting it into the bodies of human beings is no test at all. It is a great wonder to the editor that some of the experimenters who have been trying Dr. Brown-Séquard's observations outside of the laboratory, and with the material employed, have not developed erysipelas, pyæmia, and death.—ED.]

THE THERAPEUTIC USES OF ELECTRICITY.

Faradization of the thorax is very beneficial in spasmodic asthma and chronic bronchitis. The dyspnœa of the latter is by this treatment much diminished in gravity.

Even more efficacious in the paroxysms of angina pectoris than inhalation of nitrite of amyl does prompt galvanization of the sympathetic seem to be in aborting an attack of this acute affection.

Sufferers from hay fever are so much addicted to seeking refuge in a change of climate, when the season approaches when they are liable to an attack, that there has not yet been the fullest opportunity to experiment with electricity in cases of this disease. There is, however, reason to believe, from the result of treatment which has been practiced in that direction, that hay fever can be much relieved by the employment of galvanization, administered as in exophthalmic goitre.

In exophthalmic goitre itself galvanization relieves the glandular swelling and reduces the protrusion of the eyeball. The method of application is to place the anode directly under the angle of the inferior maxillary bone (over the pneumogastric) and the cathode over the solar plexus. The current should be moderate, ten minutes at a time, at intervals of two days.

Insomnia is frequently successfully treated by general galvanization or faradization when the use of drugs is contra-indicated. General faradization just before the patient is intended to sleep has a calming effect. This is caused by the capacity of electricity to equalize the circulation and reduce the pulse without lowering its tone. The application is so simple that it can be made by a nurse or a member of the family.

Sciatica can always be relieved during its acute paroxysms by the administration of descending galvanic currents. Permanent cure of it has been frequently obtained by electro-puncture, the needle being thrust down to the nerve at one or more points along the painful portion of the nerve.

Neurasthenia is not always cured by electricity alone, although it frequently is. It will generally yield to electro-massage. This obviates the assumed necessity of the gorging, which has been so general in the treatment of this complaint. The method employed is daily combined general galvanization and faradization.

Torpor of the liver is readily overcome by the faradic current.

General faradization of the abdomen every morning for a while, or, if more convenient, every evening, will always provoke a movement of the bowels within a moderate time. This treatment is to be recommended far beyond that of the taking of drugs to relieve constipation, because, instead of its being followed by constipation, the effect tends to be permanent. Constant use of drugs for that prevalent ailment of constipation can thus be avoided by the employment of methodical faradization.—DR. JOHN V. SHOEMAKER, in *Journal of the American Medical Association*, August 17th.

MEDICAL NEWS AND MISCELLANY.

EIGHTY-NINE.*

BY SAMUEL WOLFE, M.D.

For once we've met to sport and frolic,
E'en though our patients writhe in colic;
Though mighty pangs of travail rend them,
Or griping and tenesmus bend them;
Though raging fever melt their tissue,
Or black asphyxia choke their issue;
We meet in pleasant mood to dine
And, cheering, open eighty-nine.

While thus in consultation close,
We grow o'er brimming cups verbose,
We'll weld the link that us enchains,
By joining hearts, as well as brains.
A tried, true band, our founder† still
Within our midst, with hearty will,
Whose pulses yet with ardor drive,
E'en at the age of eighty-five.

To him—grand patriarchal sire,—
We drink a cup of burning fire,
Whose strong and steady, constant flame,
Still puts our lesser lights to shame;
By such an inspiration fired.
With golden threads of memory wired,
Heads, hearts and hands, combined anew,
Heroic work we dare—we do.

To-day in earnest faith we'll part,
That from our Science will spring Art,
Which, when applied with trained skill,
Will purge life's course from every ill;
Will give to man Earth's fullest cup
When emptied to be yielded up
In painless death for lasting peace;
Tranquility without surcease.

This Art attained, satiety
Will fall on this Society;
And all similitude aside,
The naked word to us applied,
Exactly seems our state to fit,
As at this emptied board we sit;
All sense of want completely stilled,
All hollow space completely filled.

Now, while our gastronomic feat
Our swift digestion makes complete,
Let's send the muse adrift in smoke,
And hope her favor to evoke
Again, when yet another year
Has sped, and we assemble here.
And if our work grows stale and flat
'Tmay cheer us to remember that

For once we'd met to sport and frolic,
E'en though our patients writhed in colic;
Though mighty pangs of travail rent them,
Or griping and tenesmus bent them;
Though raging fever thawed their tissue,
Or black asphyxia choked their issue;
We met in pleasant mood to dine,
And, cheering, opened eighty-nine.

DR. WILLIAM WAUGH, of Philadelphia, is on a trip to the West.

DR. THOMAS H. ANDREWS spent the Summer at the Chalfonte, Cape May.

EDISON says that an alternating current of one thousand volts is certain death.

DR. A. H. STILL, af New York, is in Philadelphia attending to some business matters.

DR. F. W. MCRAE assumes the management of the Atlanta Medical and Surgical Journal.

DR. ERNEST LAPLACE, of New Orleans, is visiting Dr. W. H. Pancoast at his Elberon cottage.

DR. SCMELZKOPF, surgeon-in-chief of Captain Wissmann's expedition, has been drowned at Zanzibar.

DR. JOHN B. ROBERTS has been elected Professor of Surgery at the Woman's Medical College of Philadelphia.

DR. D. L. BEAVER, a leading physician of Reading, stopped in Philadelphia in August on his way to the sea-shore.

DR. L. HARRISON METTLER, of this city, who has been abroad for some time studying neurology, returned home last month.

AN OVATION TO PASTEUR.—Two thousand students assembled before the residence of M. Pasteur last month and gave him an ovation.

THE TIMES AND REGISTER. — Eighty-six thousand copies of the Dietetic number of the Times and Register, of this city, were issued in July.

THE DELAWARE BOARD OF PENSION EXAMINERS have elected the following officers: Dr. John W. DeWitt, President; Dr. Peter Cooper, Secretary, and Dr. Howard Ogle, Treasurer.

A CHIROPODIST will henceforth be attached to every German regiment. This may seem rather odd, but keeping soldiers' feet in order is one of the most important elements of successful war.

THE CITY TROOP'S NEW SURGEON.—General Snowden has accepted the resignation of Dr. J. William White, surgeon of the City Troop, and appointed Dr. A. W. Biddle to fill the vacancy.

DR. HERBERT A. STARKEY, chief of the medical staff of the Philadelphia branch of the Red Cross Hospital, has returned to this city after eight weeks of arduous duties at Johnstown, Pa.

DR. R. P. M. AMES, of the United States Marine Hospital Service, who has been in Philadelphia for some months on duty, is about to go North to one of the watering places on a short vacation.

SEVERAL cases of poisoning have recently been caused by the consumption of chocolate and other confectionery that had been wrapped in what is called tin-foil, but really contains a large percentage of lead.

THE CHILDREN'S COUNTRY WEEK ASSOCIATION has already sent out two thousand five hundred children this year, and there are still upon their books the names of more than three thousand applicants.

* Read at the Annual Banquet of the Montgomery County Medical Society, at Norristown, Pa.

† Dr. Hiram Corson, of Conshohocken, Pa.

THE death is announced in New York of Dr. Alexander B. Mott, a distinguished surgeon of that city. He was sixty-four years of age, and distinguished for his services in the hospital organizations during the late rebellion.

DR. GEORGE STRAWBRIDGE, of No. 1500 Walnut Street, of the Wills eye staff and Professor of Diseases of the Ear at the University, is daily at his post of duty, the afternoons and evenings being spent at his country-seat near the city.

CHILDREN'S SEA-SHORE HOUSE.—Dr. William Bennett, the physician to this institution at Atlantic City, reports continued prosperity to this home. Donation day, August 10th, received some generous support from the charitable of this city.

THE wife of the Archduke Charles Theodore, of Austria, who has been assisting her husband since he became a medical practitioner, has determined, it is said, to pass the examination which will place her also on the list of qualified physicians.

THE AMERICAN EXPLORING EXPEDITION.—Dr. Rolando Kuehn, who graduated from this city in 1883, went out with the expedition to Nicaragua one year ago and settled in Greytown, in which place we understand he has met with good success.

A SURE TEST.—Assistant (learning the business)—"Is there any sure way of telling whether a tooth is sound?" Dentist—"Yes. Hit it with your hammer. If the patient knocks you down you may infer that the tooth is decayed and pull it out."—*Town Topics.*

IN China the inhabitants are counted every year in a curious manner. The oldest master of every ten houses has to count the families, and has to make a list, which is sent to the Imperial tax-house. Last year the whole number amounted to 897,383,500 inhabitants.

THE EUCALYPTUS.—California still continues to have faith in the health-giving properties of the eucalyptus. The State Board of Horticulture is just now distributing seeds, which have been received from Australia, of a large number of varieties of the famous tree.

WHAT SHUT HER UP.—"My dear," remarked Mrs. Caudle severely, to her better half, "we have lived together now for more than forty years, and I notice that your manners grow worse instead of better. What's the reason?" Mr. Caudle, meekly—"I can't say, unless it is because example is contagious."

LEHIGH VALLEY MEDICAL ASSOCIATION.—A large and interesting meeting of this Association took place at Glen Summit, Pa., on August 16th. Many valuable papers were presented, and Secretary Dr. Charles McIntire, Jr., of Easton, is to be congratulated for having such admirable arrangements for the meeting.

MERCK'S BULLETIN.—"Merck's Bulletin" for June, 1889, (delayed a few weeks in publication), contains a highly valuable table of maximal doses—by grains and grammes—for one hundred and thirteen of the newer remedies, for the majority of which no reliable dose limits have hitherto been published in this country. Publication office, 73 William Street, New York.

DIAGNOSED.—Bummer (calling at a phrenologist's office)—"See here, you old crank! I'll bet you can't tell my character from my head; there isn't a bump on it." Phrenologist (feeling bummer's head)—"Disease, alcoholism; indications, swelling of the entire head. Five dollars, please. Good morning."—*Burlington Free Press.*

PROMOTED.

Here lies the affidavit man
Who swore to circulation;
Although deceased he has increased
His worldly occupation.
In life he lied but once a day—
A petty little crime—
But since in death he's lost his breath,
He now lies all the time.

—*Washington Post.*

EGYPTIAN RAGS MAY BRING SMALL-POX.—John Cardwell, United States Agent and Consul-General to Cairo, reports to the Department of State that small-pox is raging in the lower provinces of Egypt. The matter becomes of importance to the United States in view of the large exportations of rags from that country to the States.

WHEN Mr. Andrew Clark entered London Hospital as an assistant he was in poor health. "Poor Scotch beggar," said one of the Faculty, "let him have a place; he cannot possibly live more than six months." He is now, after these many years of eminent service, Sir Andrew Clark, perhaps the most famous physician in England.

HOW HE KNEW HE WAS OF AGE.—A young, smooth-faced fellow offered his vote at a Democratic caucus, and was asked if he was old enough to vote.

"Yes," says the fellow "I am twenty-one."

"How do you know?"

"Well, I have had the seven-year itch three times," was the response.

THE well-known detection of a crime in Diplomacy, through the perfume of a woman's glove, was reproduced by a recent occurrence in Paris. A man who found his room robbed of all his jewelry perceived a peculiar perfume, and a few days later noticed it again when passing two well-dressed women in the street. They were arrested and found to be the thieves.

LAWS OF HEALTH.—Tramp—"Thankee kindly, mum; I'd no hope of gettin' sich a fine supper to-day, mum. May heaven bless ye!"

Housekeeper—"As you've had a good supper, I think you might chop some wood." "Yes, mum; but you know the old adage, 'After dinner rest a while; after supper walk a mile.' I'll walk the mile first, mum."—*Boston Post.*

REMARKABLE RENDERING OF HOLY WRIT.—A popular physician in Brooklyn has a little girl who expounded the Scripture to him in the following remarkable manner while reciting her Sunday-school lesson on Friday night: "The Lord is my shepherd and I shall not want. He maketh me to lie" (hesitating). "He maketh me to lie—and do lots of other things."

THE AMERICAN ACADEMY OF MEDICINE.—The annual meeting of the Academy will take place in Chicago, September 17th and 18th. A large number of scientific papers have been promised, and President Dr. Leartus Connor, of Detroit, is to be congratulated for his usual activity in arranging for such a large gathering of the members from various parts of the country.

PHYSIOLOGICAL OBSERVATIONS.—According to a French physiologist the wing of the ordinary house-fly makes 330 strokes in one second; the wing of the bumble-bee, 240; the wing of the honey-bee, 190; the wing of the wasp, 110; the wing of the dragon-fly, 28; the wing of the sparrow, 13; the wing of the wild duck, 9; the wing of the house-pigeon, 8; the wing of the osprey, 6.

A NEW MEDICAL SOCIETY.—The Beta Chapter of the Nu Sigma Nu Fraternity was instituted at Detroit lately. This society is strictly confined to regular practitioners and students of medicine. The list of Chapters is extending. The Alpha, located at Ann Arbor, was established in 1882. Correspondence with those interested is requested. Address F. W. Main, M.D., Jackson, Michigan.

SANITARY GUARDIANS.—A body of five female sanitary police is now established in Chicago, under the appointment of the Commissioner of Health, according to an ordinance of the City Council. The duty of the new female sanitary police is to inspect factories and tenements for the protection of the health of working women. There will probably be an effort to secure a body of the same kind in New York.

THE HIGHER BRANCHES.—Neighbor—"I understand your son is home from college. I s'pose he's up in everything?" Farmer Smythe—"You're just right. He's upstairs in bed most of the day, but if you'll come around in the evenin' about the time I'm doin' the chores, you'll see him out there in the front yard with a snowshoe in his hand chasin' a ball over a fish-net in a way that'll make your eyes stick out."

THE CONTAGIOUSNESS OF PHTHISIS.—The contagiousness of phthisis has been recognized in Germany by military command. An edict has gone forth from the War Minister that the chest of every soldier shall be examined once a month. If it does not measure enough, and does not expand with drill and athletic exercises, he is dismissed from the army as being predisposed to phthisis and likely to infect his comrades.

BUREAU OF CHARITIES—At the meeting of the Bureau of Charities of Philadelphia, it was reported that Dr. Joseph McParland and Dr. T. R. Keefer had reported for duty at the City Hospital as resident physicians.

It was reported that the number of inmates in the Almshouse was 2910; in the hospital, 1057; in the insane department, 809; children in hospital, 96; prescriptions compounded during July, 8150.

DR. OLIVIER, of Havre, advices people to be careful in drinking cider, if they would avoid typhoid fever. French cider is made, as a rule, with stagnant water, the microbes in which do not perish during the fermentation. The fever germs thrive upon the juice of the apple. In proof of this theory Dr. Olivier offers the fact that typhoid fever is more prevalent in Normandy, the great cider-making district, than in any other part of France.

TO THE QUESTION "Who invented spectacles?" an answer has been given by the Italians in favor of one of themselves. In Florence, in a little street, a memorial tablet has been inserted in the facade of one of the houses, and bears the following inscription: "To honor the memory of Salvino degli Armati, inventor of spectacles in the thirteenth century, the Guild of Artisans, on the spot once occupied by the houses of the Armati, placed this tablet, on the 5th day of July, 1885."

HEALTH IN THE FLOODED REGIONS.—Dr. Benjamin Lee, representing the State Board of Health, continues to issue health bulletins, showing the condition of the flooded districts in Pennsylvania. From the last one sent out, No. 7, we learn that the health of the people in the regions recently flooded is comparatively good. The board of health have been very active during all the summer, and have sent to each family very plain statements of the manner of keeping their household free from disease.

LOOKING BACKWARD—YEAR 2500.—Professor Huxley Darwin, who for some time has been investigating a singular twist to the wrist-bones of American men and women of the year 1889, has made an interesting discovery. From some writings of that year he has learned that constant rain-storms prevailed in the summer, and that people were in the habit of carrying over their heads a remarkable structure known as an "umbrella." From this habit, long continued, he

suspects the wrist-bones became deformed as we now find them.—*Science.*

TYPHOID IN KENSINGTON.—Cesspools that have not been cleaned within the memory of the oldest inhabitant, sewers that empty their decomposing and noxious materials into the Delaware at the water's edge, and a water supply pumped from the same river within two hundred yards of the mouth of one of the largest and foulest of these sewers, form a combination of causes that would account for epidemics enough to depopulate the district. No intelligent person can read Dr. Randle's report without arriving at the conclusion that the typhoid, like the poor, will be always with the people of Kensington while present conditions exist.—*Times.*

TYPHOID IN WILKESBARRE.—At the recent meeting of the Luzerne County Medical Society the subject under discussion was the typhoid-fever epidemic now prevailing in that city. Dr. Woodbury, of Philadelphia, and Dr. Taylor, of the State Board of Health, were the leaders of the discussion.

From reports submitted by physicians it was shown that there were over two hundred cases of typhoid fever in Wilkesbarre on August 7th, and that all but a few cases were confined to the district where water is furnished by the Wilkesbarre Water Company. This company has two reservoirs on the mountain, and in some manner the water has been contaminated, probably by the heavy rains.

The Society passed a resolution requesting the water company to empty its reservoirs and clean them at once.

PASTEUR'S METHOD.—A dispatch from Chicogo says: The residents here and elsewhere, who may be unfortunate enough to be bitten by mad dogs, will not hereafter have to go Paris to be treated by Pasteur. The County's Public Service Committee yesterday, on the recommendation of the Hospital Committee, set apart two unused rooms in Ward 13 to be used by Dr. Antonio Lagorio for the treatment of hydrophobia according to Pasteur's method. Dr. Lagorio is a Chicagoan by birth, but he spent five years as a student with Pasteur. The hospital medical staff recommended the utility of bacteriological work and preventive inoculation for rabies at the hospital, and Dr. Lagorio will undertake it.

THE STUDENTS OF INEBRIETY.—Clark Bell, of New York, on arrival in London, was given a reception by the Society for the Study of Inebriety at the rooms of the London Medical Society, which was attended by most of the eminent physicians of the metropolis. It is due to Bell to say that he was not singled out by the Society for the Study of Inebriety because his previous career makes him a subject for professional research, but because he is president of the Medico-Legal Society of New York, and also of the International Congress of Medical Jurisprudence. Bell addressed the British Psychological Association at its annual convention on Thursday, and he and Roger Foster, of New York, spoke at the banquet of the association at Greenwich in the evening.

MARINE HOSPITALS.—A telegram from Baltimore announces that Dr. George Purviance, chief surgeon of the United States Marine Hospital at Baltimore, has received notice from the Surgeon-General's Office, at Washington, of his appointment as chief surgeon of the Marine Hospital at Philadelphia.

Dr. William Henry Harrison Hutton, of Mobile, Ala., has been appointed successor to Dr. Purviance at the Remington Avenue hospital. The changes will take effect in the early part of August. Dr. Purviance has been in charge of the Marine Hospital here since December last. Dr. Williams, of Cape Charles Quarantine Station, at Norfolk, has just arrived in this city to assume his post of assistant surgeon of the Remington Avenue hospital.

A PECULIAR SUBSTANCE.—Cellulose is a fibrous substance produced in France by a secret mechanical process from cocoa-nut husk. When compressed its specific gravity is far less than that of cork. It is the lightest solid known, and therefore invaluable for life-belts and life-mattresses, while in large quantities its buoyancy will make a ship non-sinkable. It is used to fill compartments in a ship's sides, and serves to prevent water entering through a hole made by a projectile or rock, because the instant the water enters the cellulose is expanded by it to an impenetrable tightness. It does not decay or emit any odor, and has been packed in a ship's compartments without undergoing any change. If a mass of cellulose be penetrated by a projectile it will not be ignited by friction.—*Exchange.*

AN ACCOMMODATING PHYSICIAN.—A well-posted man laid down the law the other day to a reporter. He said the first thing a doctor finds out when you send for him is your pet taste, habit, articles of diet or beverage. Then he orders you to stop it. If you aren't a very big patient you have got to do it. But, said the well-posted man, I know a man who was a little sick the other day and consulted his physician. "Stop drinking whisky!" said the doctor. "Is it as serious as that?" asked the man in alarm. "Yes, it is." They had a bottle of wine, a fine cigar, and a long chat, and the doctor became very agreeable. When he got up to go the patient said: "I wish there was something else than whisky I could stop. You see—" "Well—I don't know," said the doctor. "Lemme see. Do

you eat butter?" "Yes." "Then stop butter and go on with the whisky. Good-day."—*San Francisco Chronicle.*

ESCAPING GAS IN CITIES.—Dr. Martin, the chemist of the New York Board of Health; estimates that one-tenth of the gas manufactured in that city escapes to foul the earth and poison the air. The proportion lost in this city is probably greater on account of the very old and leaky mains still in service in many of the streets. To open the soil of Chestnut Street at any point is to pollute the air for an entire square by the gas escaping from the overcharged soil. The waste is enormous, and is to a large extent unnecessary. Pipes that are thought good enough under ground would not be suffered in a house; indeed, they could not be, without causing it to be blown up. The city can have its gas-pipes fit as securely and snugly as those in private houses if it chooses, and its tolerance of old, ill-jointed leaky mains is without excuse.—*Daily Press.*

THE UTILITY OF LIME.—The high temperature produced during the slacking of lime has been but rarely utilized except as an agent in matters of accident in setting fire to vessels and to buildings. We may add to these the ordinary method of the helpers to masons, who warm up coffee for their dinner in cold weather by placing the pail of coffee on a lump of lime, sprinkling on a little water, and watching it carefully to see that it does not boil too hard. Many years ago, before the invention of the diving bell, a large wager was made between two gentlemen in regard to the possibility of one cooking a pudding at the bottom of the Thames. The winner had his pudding placed in the middle of a large sack of lime, lowered to the bottom of the river, and in due time pulled up with the result of finding that the conditions of the wager, in regard to the cooking of the pudding, had been fully carried out.

LEAVES WHICH ARE VALUABLE.—Paraguay tea, or mate, is made of the dried leaves of a species of holly cultivated in Brazil and Paraguay. From this a refreshing and restorative drink is prepared, which, like the Chinese tea, contains the active principle, theine. Three different preparations of the leaf are sold in the South America markets, and not less than five million pounds are said to be exported annually from Paraguay alone.

The dried leaves of the coca-plant, which is cultivated on the slopes of the Andes, form an important article of internal trade among the various native tribes. It is estimated that not less than thirty million pounds are consumed annually. After the morning meal, men and women alike take a mouthful of the leaves mixed with a little lime. Fresh leaves are added throughout the day, and without any additional food the consumer is enabled to do a hard day's work.—*Botanist.*

CAR HEATING.—In a recent letter on the subject of continuous car heating, Professor Lanza makes the statement that, according to experiments thus far, only a small percentage of the steam generated by a locomotive is required for heating purposes in this line. The pipe supplying the steam from the engine should not, he says, be less than one and one-half inches in diameter, while that of the radiating pipes in the cars should be two inches; the connections between the cars should be rubber, as all metal joints will leak in course of time, however careful the original workmanship may have been. Again, direct steam must be used, all plans for effectively employing the exhaust in this way having failed. The principal difficulty met with on introducing this system was to get rid of the water formed by condensation, but satisfactory traps are now supplied.

INTERNATIONAL MEDICINAL CONGRESS IN BERLIN, 1890.—We, the undersigned, do hereby give notice that according to the resolution passed at the Washington meeting, September 9, 1887, the Tenth International Medical Congress will be held in Berlin.

The Congress will be opened on the 4th and closed on the 9th day of August, 1890.

Detailed information as to the order of proceedings will be issued after the meeting of the delegates of the German Medical Faculties and Medical Societies at Heidelberg on the 17th of September in the current year.

Meanwhile, we should feel sincerely obliged if you would kindly make this communication known among your medical circles, and add in the same time our cordial invitation to the Congress.

VON BERGMANN,
VIRCHOW,
WALDEYER.

BUREAU: BERLIN NW., KARLSTRASSE, 19.

MEDICAL JOURNALISM.—A great deal of activity toward centralization has been lately apparent in the circles of medical journalists in other countries than our own. For example, the French medical journals have formed a Medical Press Association, with the object of the protection of their own interests. In the United States also a similar movement has been taking place. The Philadelphia Medical Times, the Dietetic Gazette, and the Medical Register have amalgamated, and these in combination are published as one journal, The Times and Register, by the Medical Press Company. America is a large country and England is a small one, and hence no such scheme of amalgamation is possible, nor

by any means desirable, as far as the journals devoted to medical topics in this country are concerned. In some respects our neighbors' example in this matter on the continent and in America might be worth adopting, but we should not be very much disposed to make the experiment.—*Med. Press and Cir.*

DR. JAMES L. CABELL.—Prof. James Laurence Cabell, who has just died at his home in Virginia, belonged to an old Virginia family more than one generation of which has attracted attention. The founder of the family in this country emigrated to Virginia early in the last century, and became eminent as a surgeon. Five of his sons attained distinction, and the sixth died in childhood. Prof. J. L. Cabell was a great-grandson of Dr. William Cabell, and was born in Nelson County, Va., August 26, 1813. He was graduated at the University of Virginia in 1833, and after a course of medical study there and in Baltimore and Philadelphia, went to Paris to complete his education. While pursuing his studies there, he was elected to the chair of Anatomy and Surgery in the University of Virginia. He was Chairman of the Faculty, a place corresponding to that of president in other institutions, in 1846–47. During the civil war he had charge of military hospitals for the Confederate Government. In the year of the yellow fever epidemic at Memphis, he was chosen Chairman of the National Sanitary Conference at Washington, and subsequently was made President of the National Board of Health. Dr. Cabell was a frequent contributor to medical journals, and was the author of "The Testimony of Modern Science to the Unity of Mankind," a work published in 1858.

PASTEUR'S WORK.—Despite the savage injustice done to him by supersentimental cranks, M. Pasteur is one of the most humane and merciful of men. He is vigorously opposed, of course, to putting animal life and human life on the same level of sanctity. "When this view is taken," he writes, "what is the limit? We must become firm vegetarians. We must even extend our scruples so that no living being is sacrificed. We must endure the importunities of a mosquito, the daring of a mouse, the stings of a flea—false ideas or excuses for a tirade which one finds is most often at the bottom of all the attacks on experimental physiology. Certain credulous souls, by I know not what tales, imagine that our laboratories are chambers of torture. They ignore the fact that the rabbit or the guinea-pig is rendered insensible by chloroform before it is subjected to the most insignificant operation. As for me personally, the suffering of an animal affects me so much that I would never shoot a bird, and the cry of a wounded skylark pierces me to the heart; but if the investigation of the mysteries of nature and the acquisition of new truths be at stake, the sovereignty of the object justifies all. Who, then, having the least regard for the pursuit of the knowledge of the mysteries of nature would put in the balance the sacrifice of a few fowls and rabbits with the discovery of the attenuation of virus and prophylactics which have resulted from such sacrifice?"—*Exchange.*

CREOLIN INJECTIONS IN DYSENTERY. — Dr. Sosovski has found large enemata of dilute creolin very useful in dysentery. He employed a ½-per-cent. solution, injected into the bowel twice or sometimes three or four times daily, the quantity used for each enema being generally about five pints. The patients did not experience any burning sensation or abdominal pain. The treatment was employed in sixteen cases, not one of which proved fatal, although a considerable number of patients succumbed to the disease during the same epidemic. In two cases the disease was arrested after the second enema, in nine cases the bloody stools ceased on the third day, in two cases on the fifth day, in one on the sixth, and in one on the ninth. The remaining case, though more obstinate, ultimately recovered completely. In addition to these, two children under a year old were treated successfully by means of creolin enemata. Again, another Russian physician, Dr. Kolokoloff, has used a 1-per-cent. solution in a number of cases of adults with complete success.—*London Lancet.*

NEW SKIN REMEDIES.—Schwimmer has lately, in the Wiener Medizinische Wochenschrift, published the results he has obtained in certain skin diseases by the use of salol, oxynaphthoic acid, salicylate of mercury, and anthrarobin. Salol mixed with starch in the proportion of two to one he finds a very effective remedy in all forms of venereal sores and in the buboes resulting from them. Iodoform seems to have a more rapid action, but salol has the superiority of possessing no smell. The drug also appears useful in conditions of the mucous membrane of the bladder, when given internally in doses of forty-five to ninety grains, distributed through the day. Oxynaphthoic acid did not give good results in venereal cases, acting as an irritant. In scabies, however, it did not irritate, and was an effective remedy. It may be mixed with chalk and soft soap, each ten per cent., with lard. It acted well, also, in the secondary eczema of scabies, and allayed itching in prurigo. Salicylate of mercury possesses no superiority over the ordinary remedies used in gonorrhœa and venereal sores. Given internally in doses of one and a half to two grains, it was an effective antisyphilitic drug, although apt to cause irritation of the intestine and stomatitis. Anthrarobin was found to have no beneficial effect in psoriasis, but in herpes tonsurans, eczema marginatum, and pityriasis versicolor it acted well, being

mixed with collodion in the strength of one in ten.—*British Medical Journal*, June 29th.

AN UNJUST AND UNWARRANTED ATTACK.—The Druggists' Circular continues the attack upon us, which was opened by its manager at Newport. We desire to say at once that every statement and insinuation therein made concerning the Times and Register is utterly and unqualifiedly untrue. Neither manufacturers nor patent-medicine houses own or control our company. It is not a trust, and has no designs upon its contemporaries. The absorption policy suggested only exists in Lillard's imagination. This, and the impudent attempt to represent the Times and Register as favoring substitution, are simply intended to create a little prejudice against our enterprise in the minds of publishers and advertisers.

One thing is demonstrated by the publication in the Circular, and that is, that its manager's action is adopted by the journal itself, and hence, that the latter's standing, professionally and morally, is to be gauged by that of Benjamin Lillard. To those who are familiar with this personage's career, no further reply to his insinuations is requisite; to others, we will say that the unblushing mendacity of the editorial in the Circular removes the matter into a region into which we are unable to follow Mr. Lillard. We can hold no controversy with a man who has no reputation to lose, and whose statements are bounded only by the fertility of his imagination. We trust that our readers will relieve us henceforth from the obligation of denying any future charges from the same quarter.—*Times and Register.*

THE FACULTY OF THE COLLEGE OF PHYSICIANS AND SURGEONS OF BALTIMORE recently held a meeting to fill the vacancies created by the deaths of Profs. John S. Lynch and Oscar J. Coskery and the retirement of Prof. A. B. Arnold, who has removed to San Francisco. Prof. Thos. S. Latimer was transferred to the chair of principles and practice of medicine and clinical medicine; Prof. Chas. F. Bevan to the chair of principles and practice of surgery and clinical surgery; Prof. J. W. Chambers to the chair of operative and clinical surgery, and Prof. George H. Rohé to the chair of obstetrics and hygiene. Prof. Thos. Opie will continue as professor of diseases of women and dean of the faculty. To fill vacancies created by these transfers new professors were elected as follows: Prof. Henry Sewall, of the University of Michigan, to the professorship of physiology; Dr. George J. Preston to the professorship of anatomy, with the diseases of the nervous system as a clinical branch of instruction. Dr. N. G. Keirle was elected as lecturer on legal medicine, in addition to his demonstrations in pathology; Dr. George Thomas as lecturer on diseases of the throat and chest; Dr. G. A. Liebig, Jr., of Johns Hopkins University, lecturer on medical electricity, and Dr. J. H. Branham, demonstrator of anatomy. Drs. L. F. Ankrim, Frank C. Bressler, and F. G. Moyer were appointed assistant demonstrators, and Dr. R. G. Davis, prosector of anatomy. Professor Sewall, who comes here from the University of Michigan, is an old Baltimorean, and was for several years demonstrator of biology in Johns Hopkins University. All the other appointees are residents of this city. As an evidence of esteem on the part of his colleagues, Professor Arnold was elected emeritus professor of clinical medicine on his retirement.

CURIOUS FOOD.—The lion is eaten by some African races, but its flesh is held in small esteem. The Zulus find carrion so much to their liking that, according to the late Bishop Colenso, they apply to food peopled by large colonies of larvæ the expressive word "uborni," signifying in their uncouth jargon "great happiness." David Livingstone, that keen and accurate observer, reminds us that the aboriginal Australians and Hottentots prefer the intestines of animals. "It is curious," he says, "that this is the part which animals always begin with, and it is the first choice of our men." On this point I may remind the civilized reader that the woodcock and the red mullet or sea woodcock are both eaten and relished without undergoing all the cleansing processes which most animals used for food among us generally experience to fit them for the table, so that our aversion to the entrails of animals is not absolute but only one of degree. The hippopotamus is a favorite dish with some Africans when they can get this unwieldy and formidable river monster, and when young its flesh is good and palatable, but with advancing years it becomes coarse and unpleasant. The Abyssinians, the amiable people to whom, according to the Italian Prime Minister, his countrymen proposed to teach wisdom and humanity, find the rhinoceros to their taste; so they do the elephant, which is also eaten in Sumatra. Dr. Livingstone describes the elephant's foot as delicious, and his praises will be echoed by many travellers in lands where that sagacious monster still lingers in rapidly decreasing numbers. "We had the foot," wrote the doctor, "cooked for breakfast next morning and found it delicious. It is a whitish mass, slightly gelatinous, and sweet like marrow. A long march to prevent biliousness is a wise precaution after a meal of elephant's foot. Elephant's tongue and trunk are also good, and after long simmering much resemble the hump of a buffalo and the tongue of an ox, but all the other meat is tough, and from its peculiar flavor only to be eaten by a hungry man."—*Cornhill Magazine.*

THE DANGER OF INJECTIONS OF LIQUID FROM THE TESTICLES OF ANIMALS.—A dispatch from St. Louis, August 14th, to the Philadelphia Evening Telegraph announces that Dr. A. B. Shaw, of that city, who has been making microscopic examinations of Brown-Séquard "elixir," discovered, while experimenting Saturday last, that the fluid was alive with countless bacteria, although but three hours had elapsed since the elixir was prepared. Bacillus tuberculosis, the bacillus that is supposed to cause tuberculosis, was found in great quantity, thousands being in a single drop of the mixture. Dr. Shaw could arrive at but one conclusion, namely, that the glands were from a sheep infected with bacilli of tubercule, as the mortar and pestle and the distilled water had been sterilized before mixture was made. Dr. Shaw estimated that in a drachm of the injection millions of these bacilli would have been put into the system, each one capable of multiplying itself indefinitely. The danger underlying such treatment can readily be seen, and the chances would be ten to one that tuberculosis in some form would manifest itself in the person inoculated. Dr. Shaw has since made other experiments, and in two of them the bacillus tuberculosis was discovered. The rod-shaped bacilli were also found in several samples of mixture made. Dr. Shaw said: "I would lay down the following rules for the use of the elixir in the view of my discoveries:—

"1. The laity should not use the injection upon themselves.

"2. Physicians should not use it until it has been submitted to microscopic examination, to ascertain whether it is infected with bacteria or not, and care should be taken that the glands are taken from a perfectly healthy animal.

"3. All instruments and vessels should be thoroughly sterilized, and even the distilled water should not be used until examined for bacteria."

A PHYSICIAN'S NIGHT CALL.—A story of a nocturnal visit is told with great glee by one of Philadelphia's eminent practitioners, as a joke on himself. He had been up for several nights with patients, and one evening went to his couch with the determination that he would go out that night for no one. About 1 A.M. his night-bell sounded.

"What's wanted?" he called down the tube.

"Doctor, my wife's ill, and she wants you," was the reply.

"I can't go. You'll have to get some one else."

"But, Doctor, she won't have any one else."

"I can't help it. She'll have to, for I wont go."

"Oh, Doctor, please come. She's very ill."

"Well, where is it?" (relenting a little.)

"Out Darby Road."

"Then I certainly can't go" (decidedly); "it's too far."

"Oh, but Doctor, my wife wants you," pleadingly.

"Well, get a carriage and I'll go," came the tired response.

"Oh, but, Doctor, I can't afford a carriage."

"Well, then, that settles it. I won't go without one. Good-night."

And the physician returned to his slumbers. About ten minutes later wheels rattled up to his door, and again sounded the night-bell.

"Well, what is it?"

"Doctor, here's the carriage," and the now thoroughly maddened and wakened physician dressed and went with the man. About two hours later, when the carriage brought him home, much to his surprise he was requested by the driver to "settle up." "Why, the man that hired you paid you." "Not much he didn't, sir. He said that you would when we got back here," said the driver.

And the Doctor had to pay for the use of a double carriage from 1.30 to 3.30 A.M. The case was one from which he obtained no fee, so revenge is out of the question.—*Philadelphia Press.*

A PROPER EXPLANATION.—By one of those mistakes which, we are assured, occasionally happen in even the best regulated families, an annotation slipped into one of our late issues which was worded in such a manner as to give rise to misapprehension. It scarcely seems necessary to say that neither the Times and Register, nor any member of its editorial staff, favors or desires in any manner to condone the wrong of substitution. Our record in that matter is certainly clear, and there is scarcely a medical journal in the country which has not quoted approvingly our editorial condemnation of this practice, and defense of the physician's right to prescribe whatever he considers best, and the pharmacist's duty to give exactly what is ordered, no matter what his individual opinion thereupon may happen to be. We have even gone to the trouble and expense of having special examinations made of the various pepsins and fluid extracts in the market, and demonstrated the necessity under which the prescriber rests of designating the manufacturer upon whose fluid extract he is basing his dosage; as, in the case of belladonna, we found a diversity ranging from .18 to .58 between the samples tested.

The writer of the annotation headed "A New View of Substitution," had no thought of defending the manufacturers of Febriline, whoever they may be (we do not know the parties, and have no advertising or other interest in them), in what was an undoubted wrong; the selling of one thing under the name of another. Even if commercial quinine does contain, as is claimed, a portion of quinidine, this is also a wrong, and

does not constitute a valid reason for their action. The writer of the paragraph labored under the hallucination that his item was ironical, and that he was making a very passable poke at himself and his brother physicians when he suggested that they were themselves doing the very thing they so strongly objected to in the case of the druggists. Like Mark Twain's celebrated joke about the Indian Statue, however, this one seems to have been so far fetched that nobody saw it; and our highly ethical friends of the Druggists' Circular grasped at once, and thankfully, the opportunity to place us in a false position. We have notified our brother to send diagrams with his jokes in the future; and in the meantime hasten to assure our readers that we haven't been seduced by the wily manufacturer (in fact, he hasn't tried to seduce us yet; which our contemporary will at once say is the only reason it hasn't been done) to depart from our freely outspoken detestation of the roguery of substitution. —*Times and Register.*

TWENTY QUESTIONS ABOUT ELECTRICITY.—How strong a current is used to send a message over an Atlantic cable? Thirty cells of battery only. Equal to thirty volts.

What is the longest distance over which conversation by telephone is daily maintained? About seven hundred and fifty miles; from Portland, Maine, to Buffalo, N. Y.

What is the fastest time made by an electric railway? A mile a minute by a small experimental car. Twenty miles an hour on street-railway system.

How many miles of submarine cable are there in operation? Over one hundred thousand miles, or enough to girdle the earth four times.

What is the maximum power generated by an electric motor? Seventy-five horse-power. Experiments indicate that one hundred horse-power will soon be reached.

How is a break in a submarine cable located? By measuring the electricity needed to charge the remaining unbroken part.

How many miles of telegraph wire in operation in the United States? Over a million, or enough to encircle the globe forty times.

How many messages can be transmitted over a wire at one time? Four, by the quadruplex system in daily use.

How is telegraphing from a moving train accomplished? Through a circuit from the car-roof inducing a current in the wire on poles along the track.

What are the most widely separated points between which it is possible to send a telegram? British Columbia and New Zealand, *via* America and Europe.

How many miles of telephone wire in operation in the United States? More than one hundred and seventy thousand, over which one million and fifty-five thousand messages are sent daily.

What is the greatest candle-power of arc light used in a lighthouse? Two million, in lighthouse at Houstholm, Denmark.

How many persons in the United States are engaged in business depending solely on electricity? Estimated, two hundred and fifty thousand.

How long does it take to transmit a message from San Francisco to Hong Kong? About fifteen minutes, *via* New York, Canso, Penzance, Aden, Bombay, Madras, Penang, and Singapore.

What is the fastest time made by an operator sending messages by Morse system? About forty-two words per minute.

How many telephones are in use in the United States? About three hundred thousand.

What war-vessel has the most complete electrical plant? United States man-of-war "Chicago."

What is the average cost, per mile, of a trans-atlantic submarine cable? About one thousand dollars.

How many miles of electric railway are there in operation in the United States? About four hundred miles, and much more under construction.

What strength of current is dangerous to human life? Five hundred volts, but depending largely on physical conditions.—*Scribner's Magazine.*

PLANTS AND THEIR ALKALOIDS.—In the Bulletin Médical, for May 8th, Dr. S. A. Nitard remarks that, in an important paper recently read at the Paris Academy of Medicine, Prof. Germain Sée very correctly stated that in therapeutics alkaloids and the plants from which they were derived should not be confounded. These remarks were made in regard to strophanthus and strophanthine, but the author pointed out that they might be equally well applied to a number of alkaloids and plants used daily in practice. In fact, the essentially different nature of the effects of digitalis and digitaline, of opium and morphine, of cinchona and quinine, and of many plants and the alkaloids derived from them, was well known. Coca, says Dr. Nitard, is indisputably the drug to which, above all others, these remarks may be applied. Erythroxylon coca possesses, without doubt, analgesic properties, and is held as a superior local sedative, especially where pain exists in the region of the mouth and the throat (as noted and published by Prof. Charles Fauvel long before the discovery of the local effects of cocaine), and in calling attention to the virtues of this plant it may be stated that the beneficial effects of wine of coca have been thoroughly established in tuberculous and other ulcerations on the tongue,

in the mouth, on the lips, and on the vocal cords; in all this class of cases such a preparation is of great value, prolonging as it does the anæsthetic and sedative effects of cocaine when applied topically, or when such application becomes for one reason or another impracticable, proving itself of great service to the physician by reason of its local action. As coca differs essentially from cocaine, the action of the plant upon the general economy, and not its local action, should be borne in mind. Coca is a most active stimulant tonic, especially when used in vinous combination. No better preparation can be employed than the vin Mariani, which contains all the valuable properties of the plant, combined with a generous and absolutely pure wine. This has been found to give the best results. There are numerous conditions in which this preparation is indicated; in a general way, it is serviceable in all those various diseases which come under the clinical head of anæmia, weak heart, chlorosis, various forms of cachectic conditions, neurasthenia, general debility, and convalescence from fevers. As tuberculosis presents essentially anæmic features, it may readily be understood that in it the happiest results may be obtained by the use of this preparation of coca, as also in the other forms of phthisis. Although coca is not a specific in phthisis, and although the author does not assert that it is a destroyer of the bacillus of Koch, it nevertheless proves its efficacy in that disease, he says, and, as has quite recently been stated in Libermann's important work, "La phthisie pulmonaire et laryngée," the bacillus is not the sole factor to be considered in phthisis. Contained largely as it is in the atmosphere which we inhale, it happily remains inert in the great majority of cases. In other words, its victims are those in whose organism it finds a fertile field for growth and development. All our efforts should therefore be in the direction of rendering this field less susceptible to the inroads of the bacillus of tuberculosis until such time as we may be able to act more directly upon this dangerous germ. Among other means at our command to combat and guard the organism against these inroads may be mentioned hydropathy, hygiene to the fullest extent, and climatology, which should always be taken into consideration by the physician and the patient. All these data are of absolute importance, and at the same time the physician should have at his command some agent which in all cases will, by its reliable action as a diffusible tonic and stimulant, fill the following indication during treatment, namely, the maintenance of perfect nutrition and the guarding against debility in its various forms. A tonic in every respect answering to these indications, and one which, it has been found, may be given for an indefinite period without any unpleasant reaction in wasting diseases, is wine of coca. The preparation known as vin Mariani, which has been employed by the medical profession for the last thirty years, is the only one which has given the author uniformly good results without the unfavorable features which frequently follow in the wake of tonics and stimulants. And he attributes this to the fact that it represents all the volatile principles of the plant, thus differing essentially from preparations made from the dried, comparatively inert leaf (the volatile principles being absent) or, through ignorance of the proper requirements, containing a dangerous added percentage of the alkaloid cocaine. Thus, the author concludes, will be seen the necessity of recognizing the merits of this plant independently of its alkaloid, and the wide field it should occupy in therapeutics.—*New York Medical Journal.*

BOOK REVIEWS.

The Popular Science Monthly for August. D. Appleton & Co., New York.

By far the best communication we have had the pleasure of reading for some time is found in the introductory article to this month's issue, entitled, "The Spirit of Manual Training," contributed by Prof. C. Hanford Henderson, Professor of Physics and Chemistry in the Philadelphia Manual Training School. In opposition to the more contracted idea that manual training should be conducted for the purpose of taking the place of the method of apprenticeship which has now long been discarded, Professor Henderson regards it as a means to an end, and that end the thorough preparation of boys for the active duties of life. While admitting that progress in this direction must be comparatively slow, and that the results at the annual exhibitions will fail to impress the superficial observer, he is earnest in his argument that it is the only true method, and advances very convincing reasons why his views should be adopted by those in power who have at heart the best interests of our advancing civilization. An energetic editorial also points out the salient features of the paper and justly emphasizes the practical ideas contained therein. We cheerfully commend this article to the attention of our brethren who are actively interested in the progress of the rising generation of young men, and believe its perusal would mark an epoch in the methods of training if such broad views could be instilled into the minds of teachers who have much influence in moulding the minds and directing the energies of the youth of our country.

"Agnosticism and Christianity" receives attention at the hands of Professor Huxley, but his reasoning will fall harmless at the feet of those who "believe they must maintain before they have proved," because he does not believe "this seeming paradox to be the secret of happiness."

Professor Huxley strikes some telling blows against those who implicitly believe in something they know nothing about, but we shall not undertake to say that his position is pregnable, as a medical journal is not the proper place to discuss matters pertaining to ecclesiasticism.

Other articles, however, will be found which will prove of interest and value to the physician, not the least of which is a sketch of the celebrated Frenchman, Lavoisier, who is said to have discovered oxygen about the time Priestley did. Dr. Oswald contributes a readable paper upon "The Wastes of Modern Civilization," Professor Woodhull writes of "Home-Made Apparatus," Samuel Sheldon writes concerning "Electrical Waves," and W. D. LeSueur discusses Mr. Mallock's position on "Optism." An enthusiastic editorial takes up the subject of the Johnstown disaster, and goes back to the time when John Wesley delivered a sermon on "The Cause and Cure of Earthquakes." The theory is now exploded that such disasters are a species of vengeance sent upon the inhabitants for their evil deeds, and the editor absolutely refutes this notion by showing that many of those who perished in the flood which devastated the Conemaugh Valley were as devout as any now living on the face of the earth.

Elements of Pharmacy, Materia Medica, and Therapeutics. By WILLIAM WHITLA, M.D., Physician to and Lecturer on Clinical Medicine in Belfast Royal Hospital, Ireland. With lithographs and wood-cuts. Fifth edition. London: Henry Renshaw, 356 Strand. 1889. Philadelphia: F. A. Davis.

Dr. Whitla, who is one of the foremost workers on therapeutics in the United Kingdom, has produced a marvellously practical book. In a comparatively short space of time the work has passed through five editions, showing the popularity it has enjoyed at home. Part I of Whitla's work embraces a most comprehensive account of pharmacy. It is pharmacy well taught, pharmacy well illustrated, and pharmacy that one can learn by glancing over the pages that are so clear and well expressed. The definitions of the various processes employed in pharmacy are here given in very few words, and in such a manner as to fully explain all that is necessary for the physician and student to know of this important branch. Part II, which follows, treats in a most thorough manner largely of prescription-reading and writing. In this portion of the work the author lays down some most valuable lessons and suggestions, which, if followed, will be of great service to all practitioners and students. The weak points in every medical man's knowledge upon this very important part of our profession can be greatly strengthened by a reference to the very practical views advanced by the author. In Part III, which succeeds the above, Materia Medica receives careful attention, the subject being made doubly interesting by well-prepared tables on—for instance—confections, decoctions, plasters, extracts, infusions, liniments, oils, etc. The author has been very practical in giving in these tables the composition, strength, and often the dose of the substance treated. Just in little matters like these tables serves to make the work one of much value to physicians who wish to make a rapid reference, which quickly brings good results. Under this same subject each preparation of the Materia Medica is considered in a very few words, and the dose and portion employed are also given. Part IV is probably to the busy practitioner the one of most value. Here the author speaks of all the official remedies, and not only gives his own experience but quotes from all the well-known writers in all parts of the world upon therapeutics, giving great credit at the same time to the many original investigations that have been made in the States upon this department. Dr. Whitla likewise makes his work of very great utility to physicians in all parts of the world by adding in therapeutics some very valuable prescriptions, which he has, by his large experience, found to be of service. The non-official remedies are to be found in Part V, and the author has taken great pains in this recent addition to include all that have been before the profession of any importance. We might enumerate many of the remedies that Dr. Whitla makes reference to, but it would take up too much space even to give a partial list of them. We can only say that physicians will find in this intensely interesting work all the remedies that have been recently considered and before the profession. The opinions advanced by the author upon the various remedies and their application are expressed by sound judgment and the reasoning powers of a good clinician. The concluding portion of the book includes tables by weights and measures, index of poisons and their antidotes, a well-arranged and handy general index, and an index to the British Pharmacopœia formulæ. The entire work is one of the most compact and practical now before the profession, and it deserves a most hearty support, which it has received from medical men in England, Scotland, and Ireland.

Electro-Therapeutics; or, Electricity in its Relation to Medicine and Surgery. By W. H. KING, M.D. 8vo, pp. 153. New York: A. L. Chatterton & Co., 78 Maiden Lane. 1889.

This is one of the best books for its size that has yet appeared, and it is not stuffed with useless verbiage nor antiquated ideas. We do not think the physician will go astray in selecting the work if he intends having one only as a reference-book, the subject being well handled throughout. The get-up of the volume is also excellent.

COMMERCIAL NEWS.

Sulfonal.

T. Lauder Brunton, M.D., F.R.S., says of sulfonal that "it appears to be one of the most effective of all the newly introduced hypnotics, and, although it does not, like morphine, compel sleep, it induces sleep in a pleasant manner, and has few disagreeable effects and little or no danger." The recent important decline in the price of this valuable remedy puts it within reach of every class of patients.

Chronic Pulmonary Catarrh.

J. S. Swain, L.K.Q.C.P and L.R.C.S., 37 Park Lane Terrace, London, England, says, "I have used S. H. Kennedy's Extract of Pinus Canadensis in the following case: Mr. C., aged about thirty-five years, suffering from chronic pulmonary catarrh, with pain in left side and great expectoration, cough paroxysmal and lasting some minutes; gave Extract Pinus Canadensis internally; after second bottle the expectoration was less, pain in side left and felt more in throat, and he coughs less and feels better in himself."

Bromidia.

I have used the Bromidia (Battle), and the results obtained have been really excellent. It certainly combines all the advantages of other preparations of this nature, while at the same time it possesses none of their disadvantages. The fact that it produces no unpleasant sensation on awaking renders it specially valuable.

Dr. Lud. Marc,
St. Nazaire-sur-Loire, France.

Index to Advertisements.

A classified index of advertisements appearing in The Medical Bulletin will be found on advertising page 29 of the current issue.

There is a milkman at Brixton who has a ready wit that a lawyer might envy. One of his customers caught him watering his milk at a horse-trough the other day. "What!" said the customer, in a rage, "isn't it enough that your milk is full of typhoid without your going and watering it?" The milkman turned round, and smiling compassionately, said to two or three bystanders, "What can you do with a man like this? He actually wants his typhoid straight."—*Exchange.*

For Index to Advertisements, see advertising page 29.

There is no other exhibit of the class in the United States section to rival that of Wm. R. Warner & Co. From the globe-advertising Philadelphia merchant comes an exhibit which the native pharmaciens can look at with both admiration and wonderment. The display is enough to make any Frenchman curious, and their arrangement such as to be above deprecatory criticism; and those Frenchman there could not be a people with better taste for the proper and harmonious exhibition of products. A glance through their own magnificent section of pharmacy will verify this. Readers would find superfluous a description in detail of the Messrs. Warner's essentially fine installation covering all their soluble sugar-coated pills, salts, etc. Suffice it to remark that at the Paris Universelle their exhibit is thoroughly representative, comprises all the makers' fabrications, and is decidedly an honor to the concern.—*Pharmaceutical Record.*

Mellin's Food.

In all fevers, in inflammatory conditions, in the acute gastric upsets which occur with delicate children and phthisical patients, in all gastric diseases, and in those conditions of gastric catarrh which follow upon obstructions in the pulmonary circulation, whether due to disease in the heart or lungs, liquid food containing a sufficiency of carbohydrates in soluble form as in Mellin's Food, is essential to life.

For Sale.

An ambitious physician who can command $2,500 can secure a practice paying from $5,000 to $6,000 per annum. Office practice nets $1,800 to $2,000. No charge for practice. By buying the real estate, which will cost $9,000, the above can be secured. Only $2,500 cash required; $6,500 balance on mortgage. Fine location in Delaware. Ill health cause of selling. Address George Keil,
Physicians' and Druggists' Exchange Bureau,
1231 Filbert Street.

We would call special attention of physicians and druggists to the advertisement of the Physicians' and Druggists' Exchange Bureau, under the able management of Mr. George Keil, who for the past eighteen years was connected with Dr. D. G. Brinton, former editor of the Medical and Surgical Reporter of this city (Philadelphia). Those who desire to sell their locations will find rare opportunities offered.